



Instantiating through collective bricolage: the case of the Listed-Buildings Institution

Sylvain Colombero

► To cite this version:

Sylvain Colombero. Instantiating through collective bricolage: the case of the Listed-Buildings Institution. Business administration. Ecole Nationale Supérieure des Mines de Paris, 2015. English. NNT : 2015ENMP0033 . tel-01297462

HAL Id: tel-01297462

<https://pastel.archives-ouvertes.fr/tel-01297462>

Submitted on 4 Apr 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

École doctorale n° 396 : Économie, Organisations & Société

Doctorat ParisTech

T H È S E

pour obtenir le grade de docteur

préparée dans le cadre d'une cotutelle entre

l'École nationale supérieure des mines de Paris

et la Copenhagen Business School

Spécialité "Sciences de Gestion"

présentée et soutenue publiquement par

Sylvain COLOMERO

le 14 décembre 2015

Instancier grâce au bricolage collectif: le cas de l'Institution des Bâtiments Protégés
Instantiating through collective bricolage: the case of the Listed-Buildings Institution

Directrice de thèse : **Eva BOXENBAUM**

Jury

M. Franck AGGERI, Professeur, CGS, MINES ParisTech

Mme Eva BOXENBAUM, Professeur, CGS, MINES ParisTech

M. Kristian KREINER, Professeur, IOA, Copenhagen Business School

M. Gerardo PATRIOTTA, Professeur, Nottingham University Business School

M. Charles-Clemens RÜLING, Professeur, HOS, Grenoble École de Management

Président
Examinatrice
Rapporteur
Rapporteur
Examineur

**T
H
È
S
E**

Instantiating through collective bricolage: the case of the Listed-Buildings Institution

Ph.D. Thesis
of

Sylvain COLOMBERO

Supervisor
Eva BOXENBAUM

Assessment Committee

M. Franck AGGERI, Professor, CGS, MINES ParisTech
M. Kristian KREINER, Professor, IOA, Copenhagen Business School
M. Gerardo PATRIOTTA, Professor, Nottingham University Business School
M. Charles-Clemens RÜLING, Professor, HOS, Grenoble École de Management

CGS – MINES ParisTech / PSL Research University (i3 – UMR CNRS 9217) – France
IOA – Doctoral School of Organisation and Management Studies – Copenhagen
Business School, Denmark

MINES ParisTech et Copenhagen Business School n'entendent donner aucune approbation ni improbation aux opinions émises dans cette thèse. Ces opinions doivent être considérées comme propres à l'auteur.

À Laura, mon frère, mes parents
et
à l'appel de Max Brisson

ACKNOWLEDGEMENTS

"I can't do without you" – Caribou (2014)

The last three years and almost a half are really difficult to explain and I guess acknowledgements are necessary to make the Ph.D. fellow, *i.e.* me, understand that without the following people, this phase should have been more difficult than I feel it was.

Above all, I would like to thank my supervisor Eva Boxenbaum. Beyond all the help she gave to me – and I know she dislikes such a word – she was my mentor as she allowed me to understand the academic field and outdo myself to get my place in it. Either on a professional or on a personal level, she encouraged me to push my boundaries forward while interacting with me in a very instructive and always kindly way.

Then, my sincere thanks go to my assessment committee, who accepted to evaluate my work: Pr. Franck Aggeri, Pr. Kristian Kreiner, Pr. Gerardo Patriotta and Pr. Charles-Clemens Rüling.

In a similar vein, I wanted to thank the people who believed in my ability to succeed in doing a Ph.D. : from the BETA in Strasbourg Laurent Bach and Gilles Lambert, and from the CGS, Emmanuel Coblence, Jean-Claude Sardas, Blanche Segrestin and especially Frédéric Kletz.

During my thesis, I was lucky enough to learn near a lot of inspiring people. First of all, thank you Peter Kjær and Signe Vikkelsø to welcome me within the IOA family, both formally and informally and thank you Candace Jones to accept me at Boston College. Then, thank you: Frans Bevort, Lærke Højgaard Christiansen, Thibault Daudigeos, Raffi Duymedjian, Sébastien Gand, Anne-Françoise Garçon, Armand Hatchuel, Lise Justesen, Philippe Lefebvre, Frédérique Pallez, Jesper Strandgaard Pedersen, Christophe Tuffery and Jean-Michel Wahart.

A massive thanks to the shadowed people without whom organising such an academic journey, and the associated visitings, would have been impossible: Céline Bourdon, Tina Brun, Stéphanie Brunet, Ane Lingren Hassing, Martine Jouanon, Daria Le Bozec, Lene Lillebro, Michael Smith, Pamela Vaultot and the people from the MINES ParisTech Foundation and the Région Île de France.

My sincere thanks also go to the people who have enabled and allowed this study but whom I promised anonymity.

I had the rare chance to meet wonderful people all around the world who supported me either professionally or personally or, most of the time, both. So I would like to thank, in disorder of "appearance": Benjamin Cabanes, Mélodie Cartel, Catherine Casler, Frédéric Garcias, Maud Guy-Coquille, Ben Hawbaker, Sophie Hooze, Fabien Jean, Rasmus Ploug Jenle, Maya Christiane Flensborg Jensen, Olga Kokshagina, Shenle Pen, Elvira Périac, Rebecca Pinheiro-Croisel, Rocky Rockwell, Yohann Sitruk, Virginie Svenningsen and Germain Tesnière.

I would like to express my gratitude to my "P12" friends, Kenza El Quaoumi and Lucie Noury. We remained strong and helpful, we had good laughs and even though it was often hard and painful, sometimes even impossible to stay around each other, we were here for one another, at least you were here for me.

Personally, I would like to thank all my likely lads I was not able to see as much as I wanted during this period but who never abandoned me even though they did not well understand what I did and why: Jérôme Bagyoni, Roxane Chafei-Garnier, Jean-Baptiste Grossetti, Thibault Hartmann and Vincent Rossetto.

Even more personally, my thoughts are for my entire, and now extended family: my parents, Corinne and Jean-Michel and brother, Anthony Colombero, who kept believing in me and stood next to me as they always did despite my (very) bad temper and my

doubts; my parents-in-law, Corinne and Éric, sister-in-law Chloé and nephew Sasha Pappalardo, who made everything they could to entertain and take care of me during the writing exercise.

Last but not least, I would like to thank Pr. Pierre Burbaud who provided me, every three-months, with the medical help I needed to keep working. And in parallel, a big cheers to my friends from Total Heaven Records, Bordeaux, who supplied the soundtrack of my reflection on the same time-basis.

To Laura who went into that long journey alongside me with an aide that I am convinced I was the only one ever to get. She gave me everyday the reason and the strength to succeed even when I was bloody far away.

*"I was born very far from where I'm supposed to be, and so, I'm on my way home,
you know?"*

Bob Dylan,
No Direction Home (2005)

“In Architecture, we do not invent, we can only submit to the analysis already known elements, combine them, appropriate them, but not create; our art is so compelling in the means of production that we must necessarily use the past to build in the current times”

Eugène Viollet-le-Duc,
Entretiens sur l'Architecture (Entretien n°6, Volume 1, 1863)

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	9
------------------------	---

TABLE OF CONTENTS.....	17
------------------------	----

INTRODUCTION	21
--------------------	----

1. The theoretical context: instantiating through collective bricolage	24
1.1. An alternative study on instantiation	24
1.2. The interest of intertwining Scandinavian Institutionalism & Collective Bricolage	27
2. The empirical challenge: the question of a third way to respect the embodied Heritage of listed buildings.....	29
2.1. The original debate.....	30
2.2. The current context of listed buildings.....	32
2.3. Intervening on listed buildings	36
2.3.1. Abandoning the building's function.....	36
2.3.1.1. The museumization	36
2.3.1.2. The adaptive re-use	37
2.3.2. Keeping the building's function: the set aside solution	39
3. The dissertation's aim & anatomy	41
3.1. The "so what?": findings and contributions	41
3.2. The thesis' anatomy	42

PART 1 – THEORETICAL FRAMEWORK.....	45
-------------------------------------	----

Chapter 1: The Institution and the Artifact.....	47
--	----

1. The Institution.....	47
1.1. What is an institution?.....	47
1.2. The definitions of the three pillars	49
1.2.1. The regulative pillar	50
1.2.2. The normative pillar.....	51
1.2.3. The cultural-cognitive pillar	53
1.2.5. Building the legitimacy with the three pillars.....	55
1.3. The institutional carriers.....	56
2. The Artifact.....	59
2.1. The introduction of materiality within Neo-Institutionalism (NI)	59
2.2. What is an artifact?	60
2.3. The artifact carrier or instantiation	62

Chapter 2: The Actors and the Instantiation	65
1. The actors in neo-institutionalism and the question of materiality.....	65
2. The Scandinavian Institutionalism (SCI)	68
2.1. Framing the institutional elements: a preliminary step.....	69
2.2. From the frame to the artifact: the translation	70
2.3. Beyond the translation of meaning: the question of the material construction	71
3. The Bricolage	73
3.1. The Bricolage in Organisational Studies (OS).....	73
3.2. Intertwining the bricolage roots and its contemporary views.....	75
3.2.1. The resource and the repertoire	75
3.2.2. The dialogue.....	77
3.2.3. The outcome	78
3.3. The collective bricolage	79
3.4. The bricolage in a neo-institutionalist context	81
3.5. The question of the bricolage process.....	82
 PART 2 – RESEARCH DESIGN	 85
 Chapter 3: My Research Paradigm	 87
1. The constructivist paradigm	88
2. The grounded-theory methodology (GTM).....	90
2.1. The origins and main characteristics.....	90
2.2. The constructivist grounded-theory	92
3. So why do I choose to use a constructivist GTM?	93
 Chapter 4: The Empirical Context.....	 97
1. The choice of the empirical field.....	97
2. The Listed-Buildings Institution (LBI).....	98
3. The LBI in Denmark and France	102
4. The case selection and the six cases	103
4.1. Nyboder.....	105
4.2. Sølvgade Skole.....	106
4.3. Munkegård Skole	108
4.4. The French Pantheon.....	110
4.5. The École des Mines – The Vendôme Hotel	112
4.6. The Molitor swimming pool	113
 Chapter 5: Data Collection and Analysis	 117
1. Type of data collected.....	117
1.1. The interviews.....	118
1.2. The documents: the archives or texts	121
1.3. The photographs.....	122
1.4. The observation: the participant-as-observer	123
2. Data analysis	124

PART 3 – FINDINGS & ANALYSIS	129
Outline of Part 3	131
Avant-propos: The building work's steps and actors.....	135
1. Initiating the works: the preproject	135
1.1. The client and the desire of works.....	135
1.2. The competition (or not) and the selection committee	137
2. The project: the client and the chosen architecture firm.....	140
3. The construction phase	143
Chapter 6: Designing the interpretative frame "building's authenticity": the symbolic construction of the instantiation	147
1. The question of the building's authenticity	147
1.1. An overall definition of authenticity	148
1.2. The authenticity in listed building' construction works.....	149
1.3. The challenge of defining authenticity	153
2. The interpretative frame.....	154
2.1. The cultural-cognitive tool	154
2.2. The regulative tool	158
2.3. The normative tool.....	164
2.4. An a posteriori construction	170
3. Discussion of Chapter 6.....	174
3.1. A frame built using the three pillars.....	174
3.2. The extended role of the interpretative frame	176
Chapter 7: The collective bricolage of the building: the material construction of the instantiation.....	179
1. Balancing the artifact construction: intertwining the "old" and the "new"	179
1.1. An addition of two approaches.....	179
1.1.1. The enactment of Heritage.....	181
1.1.2. The adaptation of New	187
1.2. Testing the solution: a dialogue with the frame	196
2. Selecting the resources	199
2.1. A blurred decision-making process.....	199
2.2. The six selection criteria	201
2.2.1. The individual preference.....	201
2.2.2. The collective and field alignment.....	204
2.2.3. The economics.....	207
2.2.4. The technical features.....	210
2.2.5. The time	213
2.2.6. The space	215
2.3. A simultaneous dialogue between actors' repertoires.....	218
3. Discussion of Chapter 7	222
3.1. The dialogue's first level: between the actors and the interpretative frame.....	222
3.1.1. To test and balance the outcome	222
3.1.2. To enhance creativity and innovative solutions (in a limited scope).....	225
3.2. The dialogue's second level: between the actors' repertoires.....	227
3.2.1. To approve and construct the outcome	227

3.2.2. A quest of consensus to select resources: the six selection criteria.....	229
3.2.3. A decision-making process close to a Garbage-Can model.....	232

CONCLUSION235

1. The main contribution of the instantiation construction process	237
1.1. Overview of the main findings	237
1.2. A first theoretical contribution: bridging Scandinavian Institutionalism and Bricolage through the interpretative frame design: the preliminary step of collective bricolage	239
1.3. A second theoretical contribution: collective bricolage as a structured process is not improvisation	242
2. Limits and further research perspectives.....	244
3. Relevance for practitioners.....	246

REFERENCES249

LIST OF ACRONYMS273

LIST OF FIGURES, TABLES & PICTURES.....275

FRENCH RESUME.....277

INTRODUCTION

The current introduction presents to the reader the overall topic while highlighting the research question and the associated key findings. After focusing on the theoretical context that emphasises the overlooked concept of "instantiation", I explain the empirical and societal challenge related to the modernisation of listed buildings versus their embodied Heritage respect. The introduction ends with a dissection of the different parts of the dissertation.

All along my Ph.D. journey, the tale of the famous temple named Ise Grand Shrine, or Ise Jingū, came repeatedly in my exchanges with my informants. However they had never seen this sanctuary because its entry is forbidden for commoners in regards to the Imperial “mirror” relic it has been sheltering forever. In the city of Ise, Japan, this Shinto temple has been destroyed and rebuilt in the exact same manner every 20 twenty years since 660 A.D. following an ancestral tradition (Hladik, 2008). For the Japanese, the “new” temple is identical to the “old” one – in both materials and embodied Heritage values – because they do not distinguish such concepts as the word “authenticity” simply does not exist in the Japanese language (Ito, 1994).

In Europe, such a perception is inconceivable, especially in regards to listed buildings, *i.e.* protected monuments that highlight national pride or memory. Why? Because even though such a building has to convey one single message at the end of a construction works process, both “old” and “new” elements exist *per se* and led to the never-ending question of what defines its patrimonial properties. Indeed, when a listed building experiences – or undergoes for certain people – intervention works, they inevitably modify its “authenticity”, which is nonetheless the core concept that actors have to respect in order to apprehend the embodied Heritage of the listed building and maintain its legitimacy.

When such an embodied Heritage remains saved and defended by an institution, which was the case in both Denmark and France, how is then it possible to implement such works without disrupting its? To what extent does this institution allow some “gray zones” – *i.e.* areas where the official rules could be legitimately overpassed (Anteby, 2008)? Or put differently what is the degree of freedom the stakeholders of a project benefit from to preserve patrimonial features while adding new elements to old ones?

Beyond the challenge to respect and emphasise its symbolical aspect, what constitutes a contemporary problematic is consequently the question of the materiality of the building, and how such material elements are manipulated and selected. Indeed the symbolic and material parts of the building seem to be linked as one affecting the other and vice-versa. So how the “old” and the “new” are intertwining, without jeopardising the embodied Heritage of a listed building, is the main phenomenon I am going to investigate in this

dissertation both theoretically and empirically through the empirical context of the Listed-Buildings Institution.

1. The theoretical context: instantiating through collective bricolage

In regards to the empirical study, I decide to discuss such phenomenon with the help of the neo-institutional theory as the thesis comes to study the tangible modification of a material object by actors, whose aim is nevertheless to maintain its institutional legitimacy. More specifically, I try in the dissertation to explain one of the dynamic links that may exist between actors, artifact and an institution through collective bricolage and what I refer to as the instantiation construction process. The purpose of my research is thus to understand how actors modify an instantiation while continuing to convey the institution that circumscribes it.

1.1. *An alternative study on instantiation*

In a general manner, artifacts can convey institutions (Blanc & Huault, 2014). Or stated differently, actors can transform and manipulate material objects so they reflect and shape “cultural-cognitive, normative and regulative elements that provide stability and meaning to social life” (Scott, 2008: 222). Because it operates by representing the culture, values and symbols associated with a particular institution and/or by being infused with new institutional content, an artifact is named instantiation (Hilpinen, 2011). Studies on instantiation increased during the last few years (cf. Dover & Lawrence, 2010; Carlile, Nicolini, Langley, & Tsoukas, 2013; Jones, Boxenbaum & Anthony, 2013). However these studies tend to emphasise the institutional consequences of modifying an instantiation. Scholars try to fill the gap that existed “between the studies of material and ideational aspects of institutionalisation” (Zilber, 2008: 164) and “to tackle the role of materiality and its relationship with agency” (Wijen & Ansari, 2007 in Jones & Massa, 2013: 1126).

Regarding its growing academic consideration, the neo-institutional theory highlights the various essential roles an instantiation can have on institutional processes (Jones & Massa, 2013) and to what extent actors can use artifacts “that instantiate established institutions to facilitate the transition between past habits and the elaboration of new habits for the future” (Gawer & Philipps, 2013 quoted in Lawrence, Leca & Zilber, 2013: 1028).

Beyond its essential institutional role as a way to vehicle and diffuse the institution (Scott, 2003), an instantiation has other institutional purposes. One additional role is to carry tacit knowledge or collective memory and to materially mirror the product of human actions (Gagliardi, 1990). Instantiations enable agency but also embody cultural values that actors want to communicate in order to make other people understand the conveyed institution (Rafaeli & Pratt, 2006): e.g. the use of buildings in Berg and Kreiner (1990). Moreover instantiations are actually used to respond to novel practices or jolts that can destabilise the existing institutional order, such as when actors failed “to reproduce legitimated or taken-for-granted actions” (Lawrence & Suddaby, 2006: 217).

Reciprocally, as an instantiation is composed of various physical objects (Jones et al., 2013), the addition of a new material element can alter the meaning of the instantiation (McDonnell, 2010) and thus jeopardises its institutional legitimacy. Along the vein of Pinch (2008) who already explores the role of materials in the durability of institution and in the anchoring of its legitimacy, recent studies argue that the modification or modernisation of an instantiation by means of material resources can, under certain circumstances, lead to institutional change (Patriotta, Gond & Schultz, 2012; Currie, Lockett, Finn, Martin & Waring, 2013; Raviola & Norbäck, 2013).

Moreover, actions performed on an instantiation impact the institution (Jones & Massa, 2013). For this reason, they can entail the integration or the removal of symbolic institutional dimensions (Suchman, 2003) and thus undermine the legitimacy of an instantiation because it echoes an institution. Indeed, regarding the instantiation, the cognitive and symbolic construction attached to it is *de facto* as important as the material one, because they “together cohere and endure over time” the institution (*ibid*, 2013: 1127). Therefore, an instantiation plays nowadays various roles in neo-institutionalism.

However, in regards to the modification of an instantiation, the closest scholars who studied this phenomenon are only focusing on a bottom-up approach, *i.e.* from the material use by actors to its impact on the institution. Or put differently, they study how and to what extent certain actors radically modify the meaning of the instantiation, the practices to build it, and finally its institutionalisation (Jones, Maoret, Massa & Svejenova, 2012). The actors in questions are those who manipulate materials that themselves convey institutional ideas, symbols and inherent properties.

Previous studies analyse the premeditated institutional consequences of actions performed on the artifact; however they are not concentrated their analysis on the transformation of the artifact itself. More interestingly, missing from the literature is a multi-level approach – including actors, institution and artifact – that can shed light on the instantiation and its material and symbolical constitution (*cf. ibid*, 2013). Scholars have in fact overlooked the question of the construction, or modification, of an instantiation in a context where the institution is established and does not change. More precisely, no previous studies have looked at instantiations, where the actors do not have any institutional purpose aside from, at best, respecting the institution in place. Yet, the interest in doing so stems from the importance of understanding where the meaning of the material resources is coming from and how is it possible to tangibly blend them while ensuring institutional stability.

Consequently in the current manuscript, I will focus on that overlooked issue while aiming to extend the works of Gieryn's (2002) and Jones and Massa's (2013) who argued previously that such instantiation can be apprehended as a both collective symbolic and material construction through an institutional context where actors, who evolve in it, do not want or intend to change. Regarding what missed and has never been studied, my contribution consists in outlining how such material resources and their associated meaning are collectively selected and then intertwined during the act of construct an instantiation.

1.2. *The interest of intertwining Scandinavian Institutionalism & Collective Bricolage*

The doctoral research project explores, through a constructivist Grounded-Theory methodology (Charmaz, 2014) what an organisation – here a project-team associated with specific construction works – needs to construct, both symbolically and materially, an instantiation while preserving its institutional legitimacy. The dissertation provides thus an analysis of how actors (re)build an instantiation through a two-step dynamic in which they take into account both the present institution and the existing artifact, *i.e.* the listed building.

To better understand and explain the mix between both cognitive and tangible dimensions, I propose an alternative perspective on the instantiation construction process through a focus on the agency. To handle that alternative, I root the current study in the Scandinavian Institutionalism school as it highlights the dynamics of translation, *i.e.* the conceptual transformation from institutional ideas into practices and/or into objects (Czarniawska & Joerges, 1996). More specifically, it is the mobilisation of the “frame” notion that appears as interesting because this cognitive interpretation scheme helps actors to interpret institutional elements from a given institutional context (Goffman, 1974). This literature underlines the different uses of the institutional elements to shape a collective interpretation, and by extension, associated practices (Boxenbaum, 2006). Nevertheless, the design itself of such a symbolic construction that has to be translated into an artifact is less clear – but necessary. Indeed, understanding what actors need to unfold a “framing” action will complete and link prior knowledge of scholars relating to the translation process from ideas to materials (Czarniawska & Sevón, 2005), the consequences of the materialisation of such ideas (Beasmish & Biggart, 2012) and the role that such artifacts have as institutional carriers (Yanow, 2006; Jones et al., 2012; Monteiro & Nicolini, 2014).

I propose that the symbolic part of the instantiation construction can better be apprehended and studied through the framing design and an exploration of its institutional constituents. What is still unknown and completely overlooked, however, is the understanding of how the relevant resources, *i.e.* the ones that will constitute the

artifact which will materialise the institutional frame, are selected and intertwined in a context where the institutional legitimacy needs to be respected and thus where the institution does not change despite the integration of new materials.

De facto, I emphasise the combination of symbolic and material elements through the existence of an existing cognitive structure. I thus extend the Scandinavian Institutionalism (SCI) by integrating the dynamics of bricolage as implemented by actors to both conceptualise and materially build an object by mixing resources and their associated meanings, which can thus in combination convey institutional meaning (Dover & Lawrence, 2010). Coming from Lévi-Strauss' *The Savage Mind* (1962/1966), bricolage is defined as "making do by applying combinations of the resources at hand to new problems and opportunities" (Baker & Nelson, 2005: 333). By extension, collective bricolage consists in the sharing of all the actors' repertoires of resources, via the dialogue they implement with their personal resources. Consequently, actors collectively achieve a shared objective by crafting a unique outcome that differs according to which resources actors decide to use and succeed in intertwining (Duymedjian & Rüling, 2010). The empirical context, and the obligation of actors to deal with the existing building and a limited number of material resources to restrict an embodied Heritage disruption, also participates in the reason of the choice of the Lévi-Strauss' notion. Indeed, it could illustrate the mechanisms of dialogue and decision-making in case of collective bricolage in regards to resources at hand selection. Both the dialogue and the decision-making processes currently remain poorly studied by scholars (*cf. ibid*, 2010; Boxenbaum & Rouleau, 2011; Perkmann & Spicer, 2014).

Through the study of action and agency, my main intention is thus to link SCI and Collective Bricolage approaches to initiate the shaping of a robust instantiation construction process. The interest lies in the analysis of the symbolic and material crafting of an instantiation while focusing on what are the constituents of the frame; how is this frame mobilised to enable collective bricolage, and how are the relevant material resources selected?

De facto, the **research question** guiding this dissertation is:

How do actors, through collective bricolage, modify the instantiation of an established institution?

2. The empirical challenge: the question of a third way to respect the embodied Heritage of listed buildings

To answer my research question, I present thus my results in the patrimonial architecture field through the case of the Listed-Buildings Institution (LBI), which includes concrete listed buildings, dedicated practices, regulations, etc. More especially, I focus on the case of listed buildings' intervention works named *contemporary adjustments* (Rouillard, 2006), such as renovation or extension, where the stakeholders who work on the project have to simultaneously rescue the authenticity of a building and to transform it into a modern installation while keeping intact the function for which the building was built with or protected for. More specifically, I analyse six different listed buildings located in either Denmark or France¹, where the approaches of Heritage protection are quite similar (Jokilehto, 1986). I study how actors intertwine the "old" and the "new" both symbolically and materially, *i.e.* respect the embodied Heritage while integrating new materials or requirements. Both the survival and the legitimacy of the building depend on its intervention works (Diez, 2012).

In regards to the theoretical context, the aim of the dissertation is thus to understand how an artifact "listed building" is modified while respected the established institution that rules it, *i.e.* without being "unlisted" and transformed into a mundane artifact. And if the challenge matters, it is mainly because the embodied Heritage of listed buildings, which is evaluated by actors through their interpretation of the building's authenticity, can be jeopardised during such intervention works. To fully understand how actors can

¹ In Denmark, I studied Nyboder, Sølvgade Skole and Munkegård Skole. In France, I studied the French Pantheon, the Hôtel de Vendôme/École des Mines and the Molitor swimming pool.

respect listed buildings' embodied Heritage despite those works, I firstly have to introduce to the reader to what extent it can be jeopardised.

2.1. *The original debate*

If the Listed-Buildings Institution (LBI) that protects such building is not reconsidered or challenged *per se*, the current concern regarding the embodied Heritage of listed buildings is actually associated with the question of which buildings deserve to be or not to be listed. Comprehended through a philosophical motivation and approach, this question emerged historically in 1903 into Aloïs Riegl's book *The modern cult of monuments: its character and origin*, which is still considered as a "*fundamental reading*" for everyone who wants to understand, or work on listed buildings Heritage. For Riegl², a monument is "a work created by the hand of man and built for the specific purpose to keep always present and alive in the consciousness of future generations the memory of such action or such a purpose (or combinations of one and the other)" (1903/2013: 43). Following that essential definition, the monument is a deliberated construction whose destiny was *a priori* defined. Its purpose is "intentional" and it is consequently built to last and survive over time. On the contrary, what he named the "historical monument" is not originally intended and designed for such a purpose, which is here "unintentional". This purpose is made *a posteriori* by the convergent looks and opinions of both historians and amateurs who select it from the mass of existing buildings: building not monument! Indeed all buildings can be converted into an historical artifact without originally having a memorial destination (Choay, 2007). Such historical feature is associated with the fact that nothing can replace what matters, as such thing is no longer and will never happen again. The reason why such historical value can be linked to an artistic or aesthetic one is that such a characteristic is judged *ex post*

² Aloïs Riegl (1858-1905) was an Austrian Professor at the University of Vienne. He is still considered as the founder of the modern theory of Art History.

by common people³ who do not need any scientific or historical knowledge to appreciate visual qualities (*ibid*, 1903).

Indeed, such building gains the “monument” designation in a subjective manner and it is in fact modern actors who give to the building the meaning that deserves to be remembered and protected through a listing, as the original builders sought to satisfy their own ideal or practical needs or requirements without thinking on bequeathing to future generations the testimony of their artistic and cultural activity. In the case of such an unintentional monument, the value is therefore not attached to the work in its original state, but in the representation of it since its inception. This underlined and relative value can in fact be associated with its age as well as its initial use (Arrhenius, 2004).

Beyond that opposition, both “intentional” and “unintentional” buildings are nevertheless characterised by a commemorative or a memory value and if there is a debate, it is because these two kinds of monuments are inclusively considered while talking about listed buildings. And because such value constitutes the main reason why actors thought they originally deserve to be listed, the debate is continuing, as they *de facto* both need maintenance so they could be transmitted to the next generations.

Basically, to maintain an intentional commemorative value, the monument must simply be maintained in a pristine state, *i.e.* as close as possible to its original state to avoid jeopardising the monument’s authenticity (*ibid*, 2004: 77).

However, for the unintentional monument, the approach of works is complicated for numerous reasons. An initial reason is that the embedded value that matters evolves over time and people change; but also because some present-day values, such as the use-value or the art-value which can rule the consideration of the other values involved – for instance materially –, deserve a dedicated and careful treatment in case of construction works as they could deny or disrupt the commemorative side of the object in regards to the quest of its modernisation, *i.e.* its best functional performance or its relevant restoration (Choay, 2009). Indeed, the past acquired here a contemporary value in terms of modern creation (*ibid*, 1903). For another reason, the maintenance of such a building

³ During the dissertation, I will use the definition of “common people” given by one of my interviewees, *i.e.* people “who do not have any professional or recognised skills on Heritage”.

is besides much more complicated as it has been built without any concern for its lasting. As one French Professor of Art History explained⁴:

"Today we have of course protected and listed buildings that did not have this intentional message. Among all these listed buildings, there are obviously ones that were built to last, but other ones were not. Honestly, some buildings could last 100 or 150 years but after that ... here we support things that would have been disappeared otherwise a long time ago."

By "here", the Professor meant the Western countries where the protection of unintentional monuments remains specific but also quantitatively extremely important (*ibid*, 2004).

2.2. The current context of listed buildings

Since the 18th century, the Heritage of listed buildings has been highlighted and accepted, with a boost during the end of the sixties in regards to worldwide societal change (Bercé, 2000). In contemporary times, it experiences an important exposure as well. The multiplication of seminal books (cf. Babelon & Chastel, 1994) or press releases publications and broadcasted Telly-shows focusing on such topic remain ones of the best examples of its popular consideration – e.g. the overall media coverage of the last 2015 European Heritage Days named *Kulturnatten* in Denmark or the *Journées du Patrimoine* in France.

But what best demonstrates the interest of Heritage in those two Western countries is the phenomenon that simultaneously sees the cessation of the destruction of old buildings to their – sometimes irrationally – listing, which leads to an increasing, and perhaps too numerous, number of listed buildings whose owners or operators do not know what to

⁴ Throughout the dissertation, all the quotes in *italic* come from interviewees.

do with them, e.g. churches whose destruction always leads to controversies (De Montclos, 2014a). As one former ICOMOS⁵ member explained to me:

"a long time ago, we did not hesitate to destroy buildings but now it is more difficult ... maybe because of the crisis context which makes people nostalgic about the past ... I do not know ..."

Such phenomenon is even stronger because regarding the original debate on what building deserved to be or not to be listed, there are currently too many listed "unintentional" monuments that were not originally supposed to be protected. As a French State Architect pointed out:

"At one point, I tried to give an opinion that makes sense regarding the current issues. So I started systematically to give unfavourable recommendation for the listing requests I received while saying "we have already too many listed buildings, so let us take care of what we already have unless it is an outstanding monument". We already have many difficulties carrying out our job correctly, so please stop listing like this. Such an inflation of listed buildings depreciates the quality of the listing process while listing should be considered as uncommon and exceptional. The practice of listed building is much too prominent ... so its interest is becoming weaker. People who decide to list need to shape up their perception on what should be listed."

By extension, despite the collective growing awareness on Heritage protection, the question of the maintenance of all these buildings nowadays constitutes a big issue. Indeed, the Heritage protection is struck by the context of both political and economic crises that appeal to modulated solutions in order to save such protected buildings despite such solutions have been push into the background in regards to other current and different priorities (Goven, 2011).

⁵ All acronyms will be listed at the end of the document (cf. p. 273)

Indeed, beyond the reduction of State subventions started during the seventies (*ibid*, 2011) and the present difficulties of State architects to control the listing process and check all the building modifications (Montclos, 2014b), political decisions on which listed building can be taken into account to experience intervention works to let it survive are sometimes harmful. The best examples remain the cases when the main motivation of the intervention work relies far away from any honest Heritage protection concern and answer various others personal⁶ or fashionable considerations – such as sustainable development elements integration (Gady, 2014). As a director of a Heritage Protection Society explained to me, such phenomenon of slackness is also implicitly fostered by:

“... common people who think that nothing could be done on a listed building. In their mind, it is out of danger. But it is definitely not obvious, because when you know and see how things are done, the postulate saying that a building is secured as soon as it is listed is not true.”

Paradoxically, this is this maintenance question itself in response to the impossible destruction versus the compulsory modernisation – and the troublesome due to the link between the “old” and the “new” – that may be problematic in terms of the protection of the listed building’s embodied Heritage. Indeed, one the most delicate subjects in the contemporary times within the architectural context is the relative importance of the embedded Heritage preservation versus the integration of modernity, or at least the addition of modern elements that enable its repair. Why? First because such “unintentional” listed building is the most represented type of the overall panel of listed buildings. Then, because it was not built to last regarding a defined life cycle (Brand, 1995), it represents the building that the most needs modernisation which is however fundamentally problematic regarding the building’s authenticity and its truthfully evolutions over time (Riegl, 1903 in Arrhenius, 2004).

⁶ For instance, despite the unfavourable recommendation of all the involved Heritage actors, the former French Ministry of Culture Jack Lang decided by himself the constructions of the Colonnes de Buren, worldwide known for their associated controversies (Heinich, 1995).

De facto, there is here an ideological question that jeopardises listed buildings' Heritage as it relies on an epistemological ambiguity. Indeed, the debate persists as actors involved in the institution of Listed-Buildings keep simultaneously asking questions that picture such a struggle; namely "what are we going to do with the all – and sometimes empty – listed buildings?" and "should such listed buildings be rebuilt exactly as they were before their deterioration?" Besides, in regards to the problem with the derogations that enable actors to do whatever they want to do, the situation seems deadlocked as the number of debates explodes regarding what should be done in terms of listed buildings protection. Indeed, the leitmotiv "Listed-Buildings' Heritage has to be modern as the intervention is not implemented to restore a building as it was originally" (Chatillon, 2015) is not taken-for-granted and is thus apprehended in different ways.

For instance, associated arguments between actors increase and sometimes are difficult to rule and settle like the on-going question of the arrow of the Saint-Denis Basilica, France. Despite the fact that its stones are currently stored and labelled to facilitate its reconstruction, a violent struggle takes place between French Academician Erick Orsenna and a French Heritage curator Olivier Poisson. As the first is pro-reconstruction, he advances that it could be *"an incredible manner to teach French History and introduce the discussion of the national pride and identity"*, while the latter, thus con-reconstruction, argues that *"the past is dead and we do not have to redo what our predecessors decide to dismantle, the disappearance of the arrow being part of the Basilica history"* (quoted in Leblanc, 2015).

Beyond the historical and aesthetics talks, such debate cannot be resolve without introducing the overlooked question of what to do with the building's function during an intervention (Walker & Elbé, 2011). Because interventions do not have to destroy *"le jus"* or *"original essence"* of the building (Olin, 1992), considering or not the use-value marks the beginning of the emergence of various possibilities to respect and maintain the embodied Heritage of both these intentional and unintentional buildings, as listed buildings are not only churches and historical monuments *per se*. More interestingly, it also highlights the ambiguity that exists among actors regarding listed building's authenticity, whose respect is thus essential to maintain its institutional legitimacy and consequently the "listing" protection.

2.3. *Intervening on listed buildings*

2.3.1. Abandoning the building's function

When the function of a listed building can no longer be pursued and thus is given up during construction works, its survival depends on which remaining building values the overall stakeholders of an intervention project decided or not to preserve or highlight, *i.e.* the historical- or the art-value.

Basically two types of solutions exist when the original function has disappeared or when its maintenance no longer carries any sense in the contemporary times, *e.g.* the Ottoman baths (Büyükdigan, 2003). *De facto*, the building may undergo a *museumization* and be transformed into a museum, becoming therefore an intentional-but-contemporary monument if that was not the case previously. Alternatively, a brand-new function may be given to the listed building – a phenomenon known as adaptive re-use. Dividing the change of function into two different categories makes sense because, “all buildings, except monument [*i.e.* intentional buildings], adapt anyway because the usages in and around them are changing constantly” (Brand, 1995: 2).

2.3.1.1. *The museumization*

Despite the controversies associated with such a building transformation that may ultimately transform the city into giant archaeological sites that rejects progress and innovation (Giovannoni, 1931) and underlines the societal uncertainty to feel able to reproduce spiritually or aesthetically such monuments (Lévi-Strauss, 1971), the museumization of listed buildings still constitutes the best way to preserve intentional and historical monuments. As a French State Architect explained to me, the most concerned buildings are castles or churches “*which are already museums that are not*

named as such because people enter such building to enjoy beauty and specific atmosphere”.

Closely associated with tourism and Heritage commercialisation promulgated by UNESCO (Marcotte & Bourdeau, 2010; Benhamou & Thesmar, 2011), this practice remains the most common trend used by authorities to roughly transmit such a type of ancient Heritage which is nevertheless considered as already dead or sclerotic. Indeed, museumization avoids the current generations to think outside the past box and to develop new building skills leading to the ability to edify a contemporary societal identity differing from the previous ones – a new identity that will be materially represented by the intertwining between the “old” and the “new” (Choay, 2009). In that sense, museumization relies on a conservative paradigm where the past is frozen as it only spreads an ideal commemorative but authentic message.

However, in a long-term perspective, such practice is perilous as the transformation initiated by stakeholders brings about and breaks the link to the past. Why? Because what is stored inside the structural shell may belong to an imaginary realm far from what the building represented at the time of its construction and of its museumization. For instance, if the Orsay Museum’s building as a train station well illustrated the technical revolution of the early 20th century, it is only seen today as the beautiful building that welcomes an art museum, introduced after its decommissioning and mummification, but before its listing in 1978 (Aulenti quoted in Loriers, 1986). Because the focal point is only put on what materially and aesthetically offers the building, the monument loses its symbolic part, *i.e.* its initial history and thus a part of its patrimonial interest (Herzog, 2000) while still being institutionally listed.

2.3.1.2. *The adaptive re-use*

To avoid the precocious death and unexpected oblivion due to museumization, and as Viollet-le-Duc said, “the best way to maintain a building is to find a dedicated program [*i.e.* function] for it” (quoted in Jeanelle, 2009). And that is what the supporters

of the adaptive re-use decide to do in most of the listed buildings that undergo maintenance (Rouillard, 2006).

As “a special form of refurbishment” (Langston & Shen, 2007: 194), the adaptive re-use highlights the extent into which the function renewal of listed buildings, and its associated survival, is successfully implemented despite the challenge it represents to preserve its protected and listed building’s features while modifying it (Newman, 2001). As Brand described, working with the existing building “opens minds to formerly unthinkable possibilities” (1995: 105).

Such transformation is facilitated for actors who work on listed buildings in as much as most of them are initially unintentional monuments. Indeed, there are the buildings that do “not fit only one set of functions and are strong enough to retain their character [authenticity?] as they accommodate different functions over time” (Campbell & Vanderwarker, 1992: 160-161).

Along that vein, the integration of a new function inside an existing structure can be either pretty close to the original one or far from it. The Saorge monastery in the countryside of Nice, France is an interesting example of the first solution to stick closer to the original essence of the building while not fundamentally changing the original building materially. As the architect in charge of the project explained to me:

“Originally, it was a Franciscan monastery. But between the 1960s and the 1980s, fewer and fewer monks went there so at some point, the State – who owned it and listed it in 1961 – is left with an empty building [...] and I think it was during the 1990s that finally the State decided with the help of the monastery manager to transform it into a retreat for writing.”

On the contrary, some listed buildings integrate a totally different function after their renewal. This is the case for the majority of former industrial facilities. For instance the Meunier Chocolate factory at Noisiel, France, underwent an important modernisation works that respected original aesthetics and removed every unused production tools before it became the administrative headquarters of Nestlé-France (Hubert, 2011).

2.3.2. Keeping the building's function: the set aside solution

As I have just detailed, the function, *i.e.* the use-value, is the most difficult building feature to respect in case of intervention works and thus the easiest thing to pull out and change as it sometimes does not fit with contemporary requirements or has already vanished (Dethier, 1978). As a State architect told me:

"Keeping the initial function is pretty rare for a simple reason: to keep existing while being modern, i.e. in order to be able to adapt the current society, a listed building cannot be maintained in its entirety and thus with its original function."

However, as Heritage followers since the 18th century noted, the legitimacy of listed buildings relies on their function (Rouillard, 2006). When the function is part of the building identity and plays an essential role in the reason that led to the listing, a third-but-uncommon way exists and therefore deserves attention. Indeed, the risk in getting rid off such use-value is to die out one *raison d'être* of the monument and jeopardise the overall embodied Heritage of the listed building that should better be totally destroyed than acquire a new function (Proust, 1904).

Such solution is nowadays set aside, mainly because the perpetuation of the original function does not fit the current postulate that any listed building, and thus its associated program, has to be "economically viable" to survive (Bélaval, 2012: 5; Goven, 2006: 13). Consequently, it is interesting to focus on such an alternative intervention path for three reasons.

First, some interventions on listed buildings indeed keep following the line drawn by the postulate of the father of functionalism Louis Sullivan who argues, "Form follows function" (1896). As the same State architect kept detailing:

"... an existing building is part of a program which is materialised and which must itself underline the idea. But the object is degraded over time and at one point the understanding of the building is no longer possible: so you

have to intervene to restore this idea - the difficulty being that everyone has to agree on the same idea, right? And the role of actors is thus to project into the future the remaining building by defining how this initial program will take shape through the material transformation"

Then, focusing on such a rare practice constitutes a good way to study at its climax how the "old" is truly intertwined with the "new" both symbolically and materially. By analysing for instance how a listed building can integrate modern or "green" features that enable its use without disrupting its authenticity, the analysis emphasises the paradoxical treatment of the embodied Heritage maintenance and how not to jeopardise the building's Heritage feature. Namely, if actors have to modify the function of the listed building to easily enable its survival and help maintain it through the institutional protection, then what happens to the protected building that is subject to intervention works and whose institutional legitimacy as a listed building cannot be fully grounded without taking into account its use-value?

Finally, a last interest is associated with the fact that a radical modification can lead to the "unlisting" of the building, *i.e.* the loss of its instantiatinal character. Besides, even through a use-value has to be treated carefully, this must not however put the building's users at risk while allowing them to enjoy the novelty – that shall not be thwarted by the ancient part (Riegl, 1903). Such an obligation to find the balance between the old and the new, *i.e.* the respect of the embodied Heritage versus the integration of contemporary adjustments, is thus one of the most important emergencies to deal with in regards to listed buildings maintenance (Donnedieu de Vabres, 2006). And as numerous architects expressed during my interviews, such a situation:

"... makes such intervention works quite challenging and exciting!"

3. The dissertation's aim & anatomy

3.1. *The "so what?": findings and contributions*

The main results of the dissertation pertain to how actors, who handled construction works, such as intervention works, modify an instantiation of an established institution they do not want to change. Such a process, accomplished through collective bricolage, is referred to as the **instantiation construction process** and divided in two steps.

Indeed, before proceeding, actors need to define what embodied Heritage they have to respect regarding the institutional requirements associated with the "listing" protection. They can then begin combining their resources at hand, namely the material resources coming directly from the existing listed building and from the new materials or solutions they used to implement in new buildings – and *de facto* they already have in their individual resources' stocks.

Because the institutional legitimacy is anchored in the actors' interpretation of "building's authenticity", they collectively define it through an **interpretative frame** that they design with the help of the three institutional pillars: cultural-cognitive, regulative and normative ones. This frame therefore guides collective – and material – action, because this *a posteriori* institutional construction facilitates collective decision-making. Indeed, it helps actors to delimit the scope inside which they can modify/modernise the instantiation while maintaining the features that justify its listing.

Once the frame is designed and shared among actors, I highlight how they materially construct the instantiation to reflect the symbolic construction they have just made. To do so, they engage in a collective bricolage process involving a **two-level dialogue**.

The first level focuses on the dialogue taking place between actors and the interpretative frame. I describe and analyse here how actors practice different types of trial-error tests and consider tangible compromises to balance the material construction and position the artifact in regards to the symbolic frame. The latter is mobilised to ensure that the listed building remains an instantiation of the Listed-Buildings Institution.

The second and simultaneous dialogue involves **six selection criteria** that enable actors to reach a consensus on how to build the instantiation, *i.e.* materialise the symbolic construction – both symbolic and material constructions being approved by all the stakeholders. These selection criteria are: the individual preference, the collective and field alignment, the economics, the technical features, the time and the space. These criteria help actors to select resources from each other's repertoires and to use and intertwine them.

Consequently, through these analytical findings, I propose to extend prior neo-institutional and bricolage literatures. One extension consists in linking Scandinavian Institutionalism with Collective Bricolage through the practice of framing and its main constituents in the form of the three pillars. Another extension develops the understanding of the collective bricolage process as a not-improvised activity by underlining a two-level dialogue that leads and facilitates resources at hand selection among actors with the help of the interpretative frame and the six selection criteria.

3.2. *The thesis' anatomy*

According to the Figure 1, this manuscript is organised into the present introduction, three distinctive parts, and an overall conclusion. It is structured as follow:

The **introduction** presents the topic of study, both empirically and theoretically, including my research question, key findings, and expected contributions.

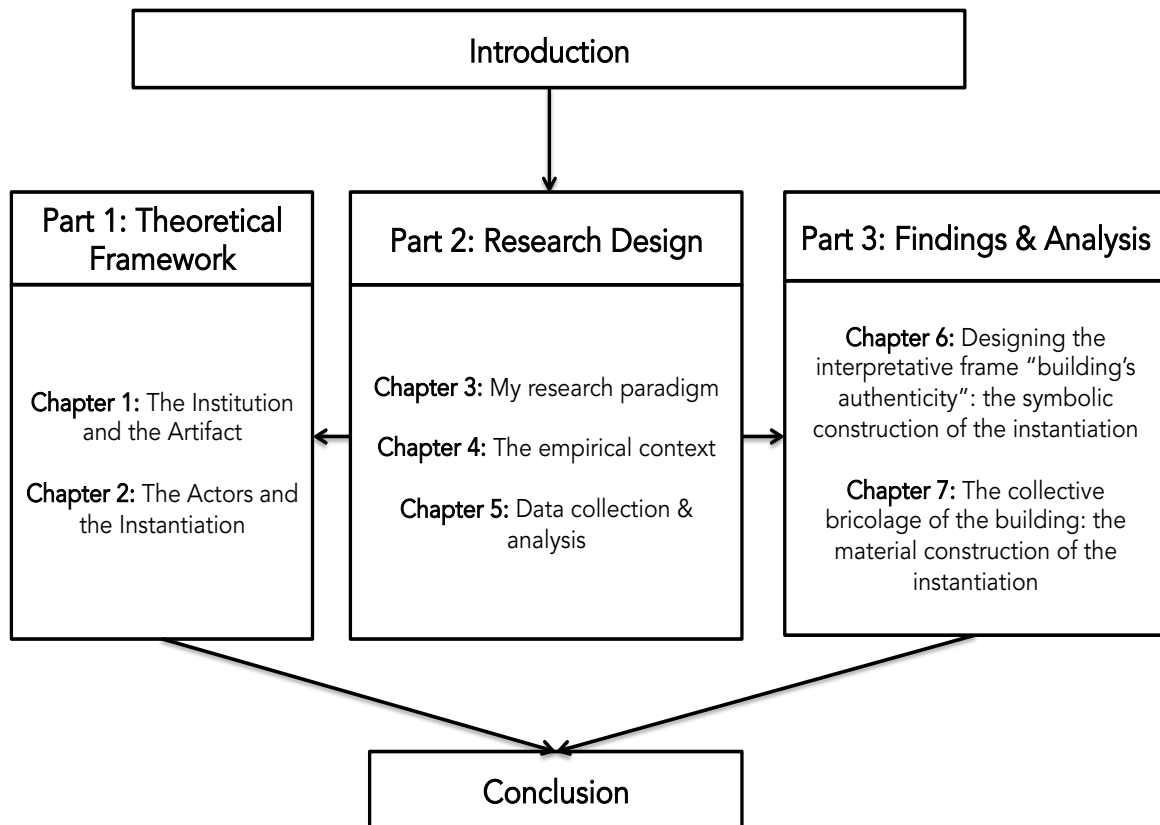
The theoretical framework constitutes the **Part 1**. Regarding the research question, this first part details what neo-institutional literature says on the link it exists between the institution and the instantiation. To do so, I divide the theoretical framework into Chapter 1 "The Institution and the Artifact" and Chapter 2 "The Actors and the Instantiation". These chapters are associated through the increasing role of agency and materiality in institutional studies (Boxenbaum, Huault & Leca, in press). Part 1 also underlines the remaining gaps that need to be filled to theorise a robust instantiation construction process with the help of Scandinavian Institutionalism and Bricolage.

The **Part 2** focuses entirely on the research design of my doctoral research and establishes the link between Parts 1 & 3. My methodology enables iterations between the empirical context and the theory and illustrates my reflexion process, starting from the empirical challenge and proceeding to find the best possible way to explain how actors protect the embodied Heritage of listed buildings while undertaking building works that modify them. After the introduction of my research paradigm, which is based on a constructivist grounded-theory methodology outlined in Chapter 3, I examine and motivate the choice of the empirical context and the six buildings in Chapter 4. In Chapter 5, I detail how I collect and analyse my data by means of qualitative research tools.

Part 3 presents the findings and analysis, after an Outline and an Avant-Propos that details the steps and actors involved in building works. The following chapters include a "results" section and another on "discussion". In Chapter 6, I focus on the symbolic construction of the instantiation, detailing the constituents of the interpretative frame and why actors need to define the "building's authenticity" to unfold the material modification of the listed building without disrupting its embodied Heritage. Chapter 7 explains the material construction of the instantiation through collective bricolage. This chapter illustrates the trial-error tests in which actors engage to balance the sometimes innovative use of material resources and their intertwining with the cognitive frame, which constitutes the first level of dialogue. This chapter further explains how actors select material resources at hand across each other's repertoires using six selection criteria to facilitate their collective decision-making process. This process represents the second level of dialogue.

Finally in a general **conclusion**, I sum up and discuss the instantiation construction process while underlining the two main academic contributions of the dissertation. I also include future research directions and suggestions, as well as current limitations. The dissertation ends with some reflections on how the study could be relevant for practitioners, mainly in relation to the two debates – economical and theological - that emerge within the last few years.

Figure 1. The thesis' anatomy



PART 1 – THEORETICAL FRAMEWORK

Regarding the research question, this first part highlights what neo-institutional literature says on the link that exists between the institution and the instantiation. Divided into two chapters in order to better shape the role of agency and artifact in such an institution/instantiation relationship, the theoretical framework underlines the remaining gaps that need to be filled to theorise a robust instantiation construction process with the help of Scandinavian Institutionalism and Bricolage.

Chapter 1: The Institution and the Artifact

Chapter 1 focuses on the definition of the institution I use in the dissertation while highlighting the importance of the institutional three pillars, carriers and thus the major role artifact currently plays in neo-institutional literature. The aim is here to introduce the concept of instantiation and to shape a better understanding of it.

1. The Institution

1.1. *What is an institution?*

Or at least what is the concept of institution I deal with in the present study?

Neo-Institutionalism, which has been defined as a mainstream organisational theory (Zilber, 2008), still struggles with the definition of an institution (Scott, 2010).

From the ambiguous definition given by Meyer and Rowan in their seminal work in 1977 that “institutions are taken-for-granted rationalized myths” (as quoted in Greenwood, Oliver, Sahlin & Suddaby, 2008: 6), the whole institutional literature offers a plethora of heterogeneous definitions of an institution (Campbell, 2004).

Paradoxically, this on-going search for a consensus on the definition helps institutional scholars to interpret and apply this concept as they see fit (Czarniawska, 2008). By using the concept of institution quite broadly, they can develop their understanding of, for instance, the rise of modern corporations (Williamson, 1985), the development of art museums (DiMaggio, 1991), the dissemination of political ideas (Steinmo, Thelen &

Longstreth, 1992), the preservation and uses of various natural resources (Dolšák & Ostrom, 2003), the emergence of French Nouvelle Cuisine (Rao, Monin & Durand, 2003), the construction of citizenship (Kamens, 2012) or oppression and resistance during the Holocaust (Martí & Fernández, 2013).

In recent decades, institutions have been analysed as:

- “symbolic systems that are experienced as possessing a reality of their own, a reality that confronts the individual as an external and coercive fact” (Berger & Luckmann, 1967: 58);
- “structures that emerge and take the specific form they do because they solve collective-action problems” (Moe, 1990: 217);
- “the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints – sanctions, taboos, customs, traditions and codes of conduct –, and formal rules – constitutions, laws, property rights” (North, 1991: 1);
- or “as a relatively enduring collection of rules and organized practices, embedded in structures of meaning, relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances” (March & Olsen, 2006: 4).

Despite their number and divergences, similarities exist across these definitions because, while former theories were inconsistent to describe the world as it really was (March & Olsen, 1984), scholars were all motivated by a shared wish to theorise the “effects of culture, ritual, ceremony, and higher-level structures on organizations” (DiMaggio & Powell, 1991: 12). Indeed, and in contrast to the old institutionalism of Selznick (1949; 1996), neo-institutionalist scholars, by rejecting the idea of the rational-actor model and stressing the significance of cognitive elements, highlighted how institutions affect organisation’s practices and structures (DiMaggio & Powell, 1983; Jepperson, 1991) and how they are resilient to change and therefore subsist or can be maintained (Zucker, 1987).

Generally, an institution can be understood as an entity that restricts or controls behaviours or practices (Zucker, 1977) while also supporting and enhancing them by

providing guidelines that can be at once facilitators and constraints on actions (Scott, 2013).

An institution is *de facto* stable but it can change, through processes known as institutionalisation or deinstitutionalisation (Tolbert & Zucker, 1996), thanks to endogenous modifications (Greenwood, Suddaby & Hinings, 2002) or exogenous jolts (Sine & David, 2003).

Where Scott tried to sum up all these approaches into one and highlight the main characteristics of institutions (Scott, 2014), I decided in the current study to ground my understanding of the institution on the comprehensive and “omnibus” definition he introduced in 1995 in the first edition of his book *Institutions and Organizations*, a definition which is commonly accepted within the field:

“Institutions comprise regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life” (Scott, 2013: 56).

According to this definition, three elements, working together, constitute the social structure of the institution by providing “the elastic fibers that guide behaviour and resist change” (Scott, 2013, 57), *i.e.* the symbolic elements that are usually implemented through human actions (Hallett & Vetresca, 2002) and sustained by associated resources (Geertz, 1973; Sewell, 1992).

1.2. The definitions of the three pillars

These three elements, referred to as pillars and summarised in Table 1, represent the core features of an institution that bring stability to social life. They are its regulative, normative and cultural-cognitive systems (Scott, 2013).

By giving consistency to three complementary and parallel dimensions into one conceptualisation, Scott provided a way to apprehend the institution holistically

(Farashahi, Hafsi & Molz, 2005). He also allowed scholars to analyse each of these elements in greater depth, *i.e.* their underlying assumptions, mechanisms, etc.

Table 1. The three pillars of institutions (Scott, 2013: 60)

	Pillars		
	Regulative	Normative	Cultural-Cognitive
Basis of compliance	Expedience	Social obligation	Taken-for-grantedness Share understanding
Basis of order	Regulative rules	Binding expectations	Constitutive schema
Mechanisms	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	Orthodoxy
Indicators	Rules Laws Sanctions	Certification Accreditation	Shared logics of action Isomorphism
Affect	Fear Guilt / Innocence	Shame / Honour	Certainty / Confusion
Basis of legitimacy	Legally sanctioned	Morally governed	Comprehensible Recognisable Culturally supported

1.2.1. The regulative pillar

This pillar “involves the capacity to establish rules, surveillance mechanisms and sanctions to influence behaviour” (Scott, 2003: 880). These regulative processes are either highly formalised, by means of legalisation, or they operate through informal channels such as traditions or unwritten codes of conduct. The essential mechanism is actually coercion (DiMaggio & Powell, 1983) and is therefore based on power struggles. This implies for some actors the ability to establish these rules and to control whether others comply with them.

As institutional economists scrutinised the regulative pillar, they highlighted to what extent organisations and actors are instrumentally motivated to make rational choices

following an utilitarian function while being aware of the punishment they face if they do not walk the line provided by the rules that influence them (North, 1990). It is thus in “the actor’s self-interest to conform” (Scott, 1995: 37). Besides, following the rules gives access to rewards and helps actors through positive incentives to empowerment. Yet a rule can also be thought of as a right.

Because this pillar mainly relies on a regulatory mechanism, the influence of the state is essential (Tolbert & Zucker, 1983; Edelman, 1992) as it acts both as a rule-maker and a referee to expand laws, directives, structures of control, etc. Indeed, the state plays an active role in the diffusion, or in the institutionalisation of organisational practices or individual behaviours that is facilitated by an associated system of sanctions. Moreover, this coercive pressure leads to more isomorphism within the institutional field and sometimes to unexpected effects, such as decoupling when rules are too restraining (Boxenbaum & Jonsson, 2008).

Through this regulative element, while it is difficult to understand how an institution emerges and what its underlying processes are, at least it explains how established institutions operate in order to survive.

In fact, because each rule – a law for instance – has its own ambiguity (Boiral, 2003), it does not entirely frame the action and thus gives to actors some leeway in its implementation. As a result, the collective interpretation of the law, and by extension its effects, is grounded on the normative or cognitive elements that soften the hard and initial context to confer upon it better social acceptance and its legitimacy (Suchman & Edelman, 1997; Roland, 2004). This is why different pillars may sustain the regulative pillar to support an institution.

1.2.2. The normative pillar

This system involves “the creation of expectations that introduce a prescriptive, evaluative and obligatory dimension into social life” (Scott, 2003: 880). It is based on values – *i.e.* what is collectively preferable and desirable – and norms – *i.e.* how organisations and actors should pursue valued ends. As prescriptive expectations, they

legitimate means to act and are the basis of the social order (Parsons, 1960), which is mainly rooted in moral (Stinchcombe, 1997). They both lead to its composition and its maintenance.

In contrast to the regulative pillar, the external pressure to conform is here due to the consideration of behaviour as morally governed and as a social obligation that makes its influence stronger than coercive sanctions (Scott, 1995). This explains why sociology theorists have primarily studied the normative element – from Durkheim (1912), who saw it as a way to enable social action, to Baudrillard (1970) who analysed norms as implicit constraints.

Within the normative approach, both choices and actions are structured and rationally justified by values and norms because they provide guidelines in order to follow what is socially taken-for-granted and expected (Dacin, 1997). Organisations, for instance, focus on adopting institutional normative prescriptions to survive and to be legitimated (Stinchcombe, 1965). For that purpose, standards represent a relevant type of norms organisations can work with (Slager, Gond & Moon, 2012); these are also helpful to institutionalise and spread practices.

In addition, because not everyone adheres to values or norms, or at least not to the same extent, the normative element gives roles to individuals and creates an evaluation system within which they interact and judge each other (March & Olsen, 1989), but also where self-evaluation takes place. An individual may feel honoured or ashamed according to her/his compliance with the norms, which can be “routines, procedures, ... paradigms, codes and knowledge” (*ibid*, 1989: 22).

By defining an institution as “an unstructured and implicit thing” (2008: 57), Heclo emphasised the role of principles and how humans, referred to as “moral agents” (*ibid*, 2008: 79), evolve in it while assessing what is right and what is wrong.

Actually, the normative pillar becomes strongly linked with the cultural-cognitive one, because as soon as the actor internalises and appropriates the norm or value, she/he automatically expresses it in her/his behaviour (Davis, 1949).

1.2.3. The cultural-cognitive pillar

As previously explained, the cultural-cognitive concept remains the principal element by which to consider an institution in neo-institutional theory (Meyer & Scott, 1983a; Weick, 1995). It involves “the creation of shared conceptions that constitute the nature of social reality and the [symbolic] frames through which meaning is made” (Scott, 2003: 880). Taken-for-granted beliefs and shared logics of actions underlie the social order and, by extension, a dimension of the institution.

Through the introduction of such a cognitive pillar, institutional scholars admit the existence of a mediator between the individual and the external world via internalised symbolic representations. By giving meaning to all their behaviours (Weber, 1968), actors construct sense and subjectively interpret symbols to finally externalise their conceived conviction or knowledge that can evolve or be maintained according to on-going happenings (Markus & Zajonc, 1985; Fiol, 2002).

Actors do not discover the world but rather invent and build, sometimes not in an arbitrary manner, social reality thanks to interactions between social arrangements and external cultural frameworks that shape interpretative processes (Douglas, 1982). A social action can thus only be understood by taking into account “not only the objective conditions but also the actor’s subjective interpretation of them” (Scott, 2013: 67).

Even though the environment constitutes a cultural framework that can explain both individual actions and the way actors detect, judge and think of what happens inside it (Bourdieu, 1984), not everyone confronting the same situation reacts in the exact same manner (Gopnik, Meltzoff & Kuhl, 1999) and some beliefs may be contested (DiMaggio, 1997; Seo & Creed, 2002). Consequently, the social construction of reality is not due to the mix between norms or values but to the sharing of interpretative models (Hofstede, 1991) that are taken-for-granted and seem correct and valid, e.g. routine. At the organisational level, the mechanism of isomorphism, as a mimetic process (DiMaggio & Powell, 1983), illustrates how this pillar works.

As Scott argues (2008a: 429):

“Cultural cognitive frameworks provide the deeper foundations of institutional forms. In formulating the classificatory systems, assumptions, and premises that underlie institutional logics, they provide the infrastructure on which not only beliefs, but norms and rules rest”.

Consequently, cognitive-cultural templates support repertoires of action (Clemens, 1997). The stronger or more powerful the cultural-cognitive element is, the better it unites shared beliefs while legitimising norms and rules (Meyer, Drori & Hwang, 2006) and old or new practices (Lawrence & Phillips, 2004).

1.2.4. The pillars’ ontologies

As previously detailed, the three pillars are interdependent but distinguished as they provide different bases of social order and motivate alternative choices and behaviours (Scott, 2010).

Empirically, not one single element but varying combinations of these elements can be observed. Indeed, few existing studies treat the three pillars at the same time (Mizruchi & Fein, 1999), and the perception of their interdependence remains strong (cf. Yiu & Makino, 2002; Trevino, Thomas & Cullen, 2008). In many situations, a particular pillar assumes primacy: the cultural-cognitive element being the most prominent (Scott, 2008a) as it testifies the emergence of neo-institutionalism.

Consequently, the emphasis – or the focus – on one element over one another leads to a lack of understanding on the interrelated processes between the three pillars (Hirsche, 1997). Yet, even though these dynamics are still not that well understood, scholars have already studied their co-existence by analysing the consequences of their misalignment (Caronna, 2004; Kraatz & Block, 2008); e.g. institutional change might be a consequence of divergent uses of resources by actors (Dacin, Goodstein & Scott, 2002).

One of the reasons why it appears so difficult to treat the three pillars on the same level comes from their ontological sources whence different lenses arise to analyse phenomena (Scott, 2013). Located between an empirical and a metaphysical environment, which characterises its scope, the social reality is apprehended as a limited

continuum (Alexander, 1983). Translated into a neo-institutionalist framework, these borders underpin antagonist conceptions of institutional elements, which range thus from realist to socio-constructivist ontology.

There are therefore two visions of how social reality is designed: one suggesting that it is concrete, materialised and objective, and another that it is impalpable but observable thanks to shared cultural beliefs that lead to accepted behaviours.

Or put differently: the former view uses the regulative element to explain why actors respect behaviours and why these subsist; the latter holds that the cultural-cognitive element enables the understanding of how such behaviours emerge (Scott, 2013). Between the two, the normative element makes the balance (Schneider, 1976) by locating and enacting the action.

And while Scott calls for a differentiated treatment of the pillars because of this ontological struggle (Greenwood et al., 2008), other scholars urge for the adoption of a more dynamic view of institutions in order to take into account their multifaceted aspect, to understand its underlying mechanisms and because stirring the three pillars together provides institutions with their “directive force” (D’Andrade, 1984), their taken-for-grantedness (Hoffmann, 1997) or their legitimacy.

1.2.5. Building the legitimacy with the three pillars

Even though the three pillars may be misaligned or combined in many different ways (Strang & Sine, 2002), they constitute a solid foundation for an institution to achieve legitimacy (Rouleau, 2007) that may operate on a variety of dimensions (Deepphouse, 1999). Since there are as many bases of legitimacy as there are pillars – *i.e.* regulative, normative and cultural-cognitive – they may be in conflict and lead to the contestation of the overall legitimacy of an institution. However the more the three systems are combined, the stronger this legitimacy will be (Scott, 2013).

While being “possessed objectively, yet created subjectively”, legitimacy is a generalised perception or assumption that the actions of an entity are desirable, proper or

appropriate within some constructed system of norms, values, beliefs, and definitions (Suchman, 1995: 574).

In the neo-institutional literature, if legitimacy “is not a commodity that can be possessed or exchanged but a condition reflecting perceived consonance with relevant rules and laws or normative values or alignment with cultural-cognitive frameworks” (Scott, 2013: 72), it represents an essential condition to survive and keep existing in the field (Harmon, Green & Goodnight, 2015). Furthermore, legitimacy is often comprehended as a kind of resource extracted from the institutional environment (Dowling & Pfeffer, 1975) that acts like a taken-for-granted belief system (Chung, Berger & DeCoster, 2015).

Whatever elements of the institution are privileged, the construction of legitimacy is a matter of concerted social power and thus involves consensus by a social audience (Stinchcombe, 1968; Johnson, 2004). Managing legitimacy is an important task for any organisation (Meyer & Scott, 1983a), and both internal and external actors can judge legitimacy by assessing its conformity to a specific model (Ruef & Scott, 1998) and by collectively objectifying it (Bitektine, 2011).

However the construction of legitimacy – or the legitimation process – remains ambiguous and difficult to examine empirically (Tornikoski & Newbert, 2007) and few scholars have addressed this issue (DeJordy & Jones, 2008), which should be treated by making no distinctions between the pillars (Deephouse & Suchman, 2008). More paradoxically, and even though it illustrates the stability of every institution (Ashforth & Gibbs, 1990; Elsbach & Sutton, 1992), the question of maintaining and transmitting legitimacy has so far been overlooked. Indeed, studies have only focused on the role of discourses and communications (Patriotta, Gond & Schulz, 2011; Bitektine & Haack, 2015) and not on other vehicles, such as artifacts (Scott, 2003).

1.3. *The institutional carriers*

Beyond the construction of legitimacy which they bring about, the three pillars of an institution are embodied and conveyed by various types of vehicles or “carriers”

(Jepperson, 1991). They can carry one or various combinations of institutional elements and they are, like the pillars, interdependent (Scott, 2013).

Since institutions do not exist empirically (Heclo, 2008), imagining the medium through which an institution “travels” helps scholars to study its stability, transmission or change from place to place and from time to time. Also, taking place within the structuration duality (Giddens, 1984), the carriers allow the recognition of the agency processes and the constraints of the social structure, as well as the variety of institutional forms (Scott, 1995).

A carrier conveys “metaphor” (Reddy, 1979) and is not only a neutral vehicle but, better yet, a mode of transmission that affects the nature of the message and the ways in which it is received (Abernethy, 2000). Moreover, such a message is transformed or edited while being transported (Sahlin & Wedlin, 2008).

Cross-classified with the pillars that emphasise their features (*cf.* Table 2), Scott defines four types of carriers (Scott, 2003: 882):

- symbolic systems: “various types of symbolic schemata into which meaningful information is coded and conveyed”, e.g. the introduction of the alphabet (Innis, 1995) or the emergence of new technologies (Appadurai, 1996) to transmit or mix symbols and ideas;
- relational systems: “included both interpersonal and interorganizational linkages”, e.g. the creation of clusters to develop interactions and resolve ambiguity (Owen-Smith & Powell, 2008);
- activities: “habitualized behaviours, patterned actions reflecting tacit knowledge held and conveyed by actors”, e.g. routines (March & Simon, 1958);
- artifacts: “material culture created by human ingenuity of tasks”.

These four carriers can be combined (Scott, 2003: 890). In most studies, while relational systems, activities and artifacts provide the conduits, symbolic systems supply the content (*cf.* Redding, 1990; Brown & Duguid, 2000; Sahlin-Andersson & Engwall, 2002; Fiss & Zajac, 2006) as they guide behaviours and remain at the heart of Neo-Institutionalism through the attention paid by scholars to the cognitive-cultural pillar (Scott, 2008b).

Indeed, within an environment based on strong and shared beliefs, the social reality is constructed:

- with various activities – such as routines to respect them (Powell & Colyvas, 2008) or works to create, maintain or disrupt them (Lawrence, Suddaby & Leca, 2009);
- which are enabled thanks to the interactions between actors through implicit (Granovetter, 1973) or explicit networks (Strang & Soule, 1998);
- but also through the interactions actors have with possible artifacts in which they materialise such symbolic values or cultural schemas (Adler & Kwon, 2013).

Table 2. The institutional carriers (Scott, 2013: 96)

		Pillars		
		Regulative	Normative	Cultural-Cognitive
Carriers	Symbolic systems	Rules Laws	Values Expectations Standards	Categories Typifications Schemas Frames
	Relational systems	Governance systems Power systems	Regimes Authority systems	Structural Isomorphism Identities
	Activities	Monitoring Sanctioning Disrupting	Roles, jobs Routines Habits Repertoires of collective action	Predispositions Scripts
	Artifacts	Objects complying with mandated specifications	Objects meeting conventions, standards	Objects possessing symbolic values

Yet, because they are interrelated, “the mechanisms that operate alterations of individual and collective perception” (McAdam, Tarrow & Tilly, 2001: 26) can be applied to the four types of carriers. These mechanisms, e.g. translation or bricolage, also facilitate the analysis of how institutional ideas circulate via carriers (Scott, 2013).

In the current study, I have decided to focus on the artifact carrier, because materiality, neglected for too long, depicts the new favourite lens of institutional theorists

(Boxenbaum, Huault & Leca, in press) and because the actions performed on this carrier can alter its embodied symbolic institutional elements (Czarniawska & Joerges, 1996) while echoing its legitimacy (Suchman, 2003).

2. The Artifact

2.1. *The introduction of materiality within Neo-Institutionalism (NI)*

Even though the social sciences have a long tradition of paying attention to materiality (Barthes, 1957; Lévi-Strauss, 1962/1966; Deleuze, 1972), its skyrocketed emphasis within the organisational theories is quite new (Pierides & Woodman, 2012) and reflects the desire of scholars to include material arrangements into them (cf. Orlikowski & Scott, 2008; Leonardi, Nardi & Kallinikos, 2012).

With the cognitive turn that pushed scholars to study the frameworks of linguistic modes (Rorty, 1967) and shared cultural beliefs (Meyer & Rowan, 1977), which both affect practices and behaviours (Lounsbury & Crumley, 2007), neo-institutionalist scholars kept concentrating on immaterial and discursive elements (Hwang & Colyvas, 2011). The same lack of consideration for such materiality-related concerns has thus been observed within this theory (Scott, 1995) until recently. As Zilber summarises (2008: 173):

“To begin with, institutions were understood as social constructions (Berger & Luckmann, 1967), that is, structures, practices and meanings systems that come to be taken-for-granted through their repeated social enactments, which involves first and foremost, language and other symbolic expressions and artifacts”.

When Latour (1996) expresses that social phenomena, such as collective dynamics, are sustained in space and time through efforts by both humans and nonhumans, he hints, in institutional terms, that both the “preservation and change of social arrangements can

only be explained when the actor recognizes the active involvement of material entities in the process” (Monteiro & Nicolini, 2014: 2). In other words, institutions have a material dimension whose agency enhances a better understanding of the work of producing or reproducing the institutional dimensions (Pinch, 2008).

Without totally considering that material objects have agency and are autonomous actors (cf. Latour, 2005), neo-institutionalists began to show an interest in materiality in their studies through a posthumanist stance (Roosth & Silbe, 2009), *i.e.* actors interact with materials to both reproduce and interpret old and new symbolic elements.

Based on a pragmatic principle of focusing on the consequences of materiality (Jones, forthcoming), the aim of this approach is to implement “a new conceptual repertoire and vocabulary that allow [scholars] to think and talk more deeply about the social and material as inherently entangled” (Carlile, Nicolini, Langley & Tsoukas, 2013: 3).

Indeed, materials cannot be reduced to envelopes of meanings (Pels, Hetherington & Vandenberghe, 2002) and they have to be treated as facilitators or constraints of the construction of social life (Latour, 2000; Pinch & Swedberg, 2008).

As Scandinavian institutionalists have explained, by translating institutional ideas into materials, such as objects or artifacts, (Czarniawska & Joerges, 1996; Sahlin & Wedlin, 2008), actors highlight their active role as carriers (Scott, 2013). For instance, buildings materialise institutional ideas and extend their influence (Jones & Massa, 2013) – the change is perceived via material persistence that links the past to the future (Olsen, 2013).

Thus, because they enable durability of institutions (Jones, Boxenbaum & Anthony, 2013), the material turn includes both practices and artifacts in neo-institutionalism.

2.2. What is an artifact?

Originally in opposition to natural objects, Aristotle defined an artifact as a thing that does not exist by nature and that is the product of art (Aristotle, 1930). Involving intentional agency, an artifact is *de facto* defined as an object that results from human activity and has been intentionally made for some purpose (Andrefsky, 2001). An object

is an artifact “if and only if it has at least one author” – by extension an artifact can be collectively produced (Hilpinen, 1993).

Ontologically speaking, an artifact, which is a product of an activity, can be a singular object, such as a building, or an abstract one, like an artificial language. A concrete object can be either dependent or independent from its substrate: *i.e.* it may or it may not be separated from its immediate surroundings without destroying it (Simons, 1987).

Actors can create material artifacts as well as improve and adapt them to new situational factors (Petroski, 1992) – these other possible actions consist of the separation, reshaping or assemblage of such objects (Oswalt, 1973) that act as tools enabling these modifications.

By putting their intentions into it, actors invest artifacts with their intended character. An artifact is a “creation of the mind” (Thomasson, 2007: 52). However, its identity is judged and stabilised at the end of the production process, because the actual character it takes on may vary from its intended character due to the struggle between the author’s expectations or explanations and the reactions of other actors (Eisenstein, 1979; Woddmansee, 1992).

Furthermore, and because an artifact serves different purposes, its social acceptance is evaluated on the basis of its productive character, *i.e.* on the degree between the intended character, which can be modified during the process, and the actual character (Hilpinen, 1995). Indeed, an artifact is accepted only when all the actors recognise the certain purpose its author intentionally gave to it during its conception (Dipert, 1993): *e.g.* in the Jurassic Park movies, a real-sized dinosaur-puppet is an artifact while the movies are being filmed, but it is interpreted as a real one by the audience who see it as intended by the director and the puppet creator. The materialisation of such a collective and productive character construction is known as instantiation (Hilpinen, 2011).

In that sense, an instantiation is socially constructed, and it is the overall cognitive interpretation of actors that enables the distinction between that artifact and others and its legitimacy (Hilpinen, 1992). Ultimately, the shared symbolic belief is intertwined with the material object.

2.3. *The artifact carrier or instantiation*

The study of the artifacts and their role as carriers nowadays emerges and is addressed in various ways in neo-institutional literature.

Following the anticipation of Science and Technology Studies (STS) (Hitchin & Maskymiw, 2009; Gherardi, Meriläinen, Strati & Valtenon, 2013) which treat artifacts as immutable but nevertheless socially constructed objects and confer upon them an “actor” status within the overall interaction system, *i.e.* the network, (Callon, 1986; Latour, 1987; 1993; Bonneuil & Joly, 2013); in NI, artifacts are used as a way to underlie institutional processes (Rao, Monin & Durand, 2005) as scholars consider them as instantiations of institutional practices (Zilber, 2011) or logics (Friedland, 2013), which makes easier the understanding of the institutionalisation of ideas they carrier and, at the end, their legitimacy (Lanzara & Patriotta, 2007).

In the present study, and according to Scott’s focus on the artifact carrier (Scott, 2013), an artifact is defined as “a discrete material object, consciously produced or transformed by human activity, under the influence of the physical and/or cultural environment” (Suchman, 2003: 98).

As studied by psychologists, anthropologists or organisational theorists, an artifact can take on various forms ranging from a wooden stick (Köhler, 1917) or trunk (Lévi-Strauss, 1962/1966) to complex technologies, such as a CT scanner (Barley, 1986).

As Orlikowski argues (1992), an artifact can be analysed by using Giddens’ structuration model (1984) in order to accommodate both social structure and human agency. By instantiating the structuration framework through artifacts, scholars can recognise them as the products of human action, which once materialised become objectified and integrated into the institutional environment. *De facto*, such an object can be used as a tool to create new ones while providing new constraints imposed by the purpose, *i.e.* its symbolic meaning or its use actors have already attributed to it depending on the situation in question. An artifact can therefore be modified, physically or socially, throughout the interaction between actors and the object as they can “interpret, appropriate and manipulate it in various ways” (Orlikowski, 1992: 408) – an artifact can incorporate various constellations of ideas and instantiate different social beliefs.

Because the nature of such objects is socially constructed regarding the contextual factors and how actors collectively interpret them (Bijker, Hughes & Pinch, 1987), artifacts primarily act as “physical scaffolding” or as concrete mediators between actors and the institution they convey (Orlikowski, 2006). Furthermore, as they also “embody both technical and symbolic elements” (*ibid*, 2003: 99), they become the reflection of the institution and thus structure intentional human actions (Gagliardi, 1990).

As an institutional vehicle (Scott, 2003), the instantiation, *i.e.* the artifact carrier (Hilpinen, 2011; Jones & Massa, 2013), can be associated with the pillars because the three elements can affect its construction (Scott, 2013).

Indeed it is often:

- subjected to laws or rules – e.g. safety regulations for atomic plants;
- shaped by normative processes – e.g. companies’ discussions to set a standard (Katz & Shapiro, 1985);
- and embodied with cultural beliefs that provide the material with its essence – e.g. red wine and bread as symbols the blood and body of Jesus-Christ for Catholics during the communion ceremonial (*ibid*, 2013: 104).

Chapter 2: The Actors and the Instantiation

After having introduced the concept of instantiation, Chapter 2 focuses on how actors interact with artifacts within neo-institutionalism. I try here to shape the remaining gaps that need to be filled to theorise how an instantiation is both symbolically and materially built by actors. This is the reason why Chapter 2 emphasises the frame design and the collective bricolage process and to what extent both literatures could be associated for that purpose.

1. The actors in neo-institutionalism and the question of materiality

Alongside the elements I developed in the previous section, the role of actors within an institution has to be briefly introduced, as actors remain essential in the construction of an instantiation.

Not too long ago, actors were considered as no more than individuals without too much reflexivity and strongly subjected to the environment in which they were embedded (Boltanski & Thévenot, 1991; DiMaggio, 1991).

Since the end of the 1980s, and thanks to the concept of *structuration*, which recognises the duality of the social structure as both a product of and platform for social action (Giddens, 1984), scholars have paid more attention to how individuals can affect institutions (Oliver, 1991; Christensen, Karnøe, Strandgaard Pedersen & Dobbin, 1997).

In an institution, actors produce and reproduce the social structure by following the rules and mobilising the resources – human or material (Sewell, 1992) – in order to realise the interests they value (Maguire, Hardy & Lawrence, 2004) or those pushed by the institutional mechanisms. For instance, actors can guide new behaviours by means of old

ones (Weick, 1979) or respect others by selecting – or not – specific rules (March & Olsen, 1989).

This capacity to act refers to the *agency* concept, which underlies “the actor’s ability to have some effects on the social world by altering the rules, relational ties or distribution of resources ... Between the context and response is the interpreting actor” (Scott, 2013: 94).

However, actors, both individual and collective, possess some degree of agency and not all of them are capable of articulating and justifying the reasons for their own choices (Emirbayer & Mische, 1998) and overcoming the paradox of the embedded-agency (Battilana & D’Aunno 2009). This ability among certain actors to extract themselves from their “iron cage” is known as *institutional entrepreneurship* (DiMaggio, 1988) and can drive the creation, maintenance or disruption of the institution (Lawrence & Suddaby, 2006).

If the question of agency is thus necessary to both make institutions persistent and allow them to evolve – or sometimes disappear (Oliver, 1992) –, in any case, and whatever the end actors pursue, all their activities, as well as their organisational structures, and the resources they use are simultaneously provided and constrained by the institutional elements, *i.e.* the pillars (Meyer & Scott, 1983b).

Regarding the materiality and through agency, NI basically tries to clarify the link between artifacts and the institutional symbolic elements in order to better explain the whole social order (Nicolini, 2012).

As it previously helped them to consider the importance of discourses (Davis, 2010), institutional scholars primarily focus on practices to integrate the question of artifacts (Pentland & Feldman, 2005; Blanc & Huault, 2014), because “many organisational practices unfold in a world of objects, that can be buildings, tools or products” (Boxenbaum et al., in press: 9).

However, even though all current institutional studies highlight the interactions between actors and objects, scholars do not use the same focal point to analyse “instantiation” phenomena.

On the one hand, the lens is put on how actors use artifacts to influence and motivate future behaviours or practices before or during institutional processes (*cf.* Gawer &

Philipps, 2013). For instance, in an Italian business newspaper, journalists handled the transition from a paper-based to a digital-based medium using the leftover and concrete artifact, whose associated practices supported and helped the definition and the adaptation, or not, of the new one (Raviola & Norbäck, 2013).

On the other, there is an interest in how artifacts themselves can impact institutional actions (cf. Rowland & Rojas, 2006): e.g. the iconic status and the popular and mediated success of Frank Lloyd Wright's Unity Temple, which was due to a revolutionary use of materials, led to the diffusion of the *modern architecture* movement (Jones & Massa, 2013).

Yet, because of this difference of treatment, a gap remains between the symbolic and the material dimensions, and few studies integrate both perspectives at the same time (Monteiro & Nicolini, 2014; De Vaujany & Vaast, 2014). In these studies, within a given institution, actors keep interacting with an artifact while implementing and defining their practices according to the object but also in order to change it or not. By doing so, these actions may alter the instantiation and by extension jeopardise its institutional legitimacy (McDonnell, 2010).

A more integrated focus is thus needed to fully understand how actors build an instantiation. To address such a gap explaining the combination of both the cognitive and tangible dimensions, an alternative perspective based on the double role of actors has to be implemented according to the paradigms of new institutional theory. To do so, I root the current study on the Scandinavian Institutionalism literature, which relevantly analyses how actors dynamically but conceptually transforming institutional elements into practices (Boxenbaum, 2006) or objects through translation (Czarniawska & Joerges, 1996; Sahlin-Andersson, 1996). And simultaneously, because this involves the combination of symbolic and structural elements (Stark, 1996), I mobilise the mechanism of bricolage (Lévi-Strauss, 1962/1966; Douglas, 1986) used by actors to design and build an outcome while intertwining several (material) resources and their associated meanings. Furthermore, through the study of action, a link between the two approaches makes it possible to highlight the process of the instantiation construction and makes the theorisation more robust while integrating them together.

2. The Scandinavian Institutionalism (SCI)

Primarily based on the works of R.W. Scott, J.G. March and J.W. Meyer on decision-making under ambiguity, the main aim of Scandinavian Institutionalism is to understand “praxis” and their interrelationships with the institutional elements in the conceptualisation of the social order (Sahlin & Wedlin, 2008). More specifically, this approach highlights “how institutions emerge, change, and vanish – not merely that they do” (Czarniawska, 2008: 773), as well as the dynamics of how circulated ideas become taken-for-granted and provide or maintain legitimacy (Meyer & Rowan, 1977; Tolbert & Zucker, 1983).

To reach this goal, and according to their strong constructivist tradition of in-depth and qualitative field studies, Scandinavian institutionalists adopt a micro-process-oriented approach more than a structure-oriented one (cf. Meyer, 2006).

Actors are thus central to SCI because it challenges isomorphic diffusion and enhances their role to interpret ideas in a way that better substantiates their activities (Boxenbaum & Strandgaard Pedersen, 2009). To pursue the quest of legitimacy, they develop different strategies while corroborating the requirements and constraints of their environment (Oliver, 1991) and rarely undoing the existing institutional elements (Borum & Westenholtz, 1995).

They are “soft actors” (Meyer, 1996) and their practices are neither stable nor intrinsic as their interests, identities and resources are socially embedded and come from ideas they appropriate and imitate (Brunsson & Sahlin-Andersson, 2000). Yet, they deal with a lot of uncertainty when they need to respond to external pressures (Brunsson, 2000).

Consequently, if institutions are stable (Scott, 1981), SCI argues the paradox that such stabilisation occurs when change is planned – as people persuade each other to change their beliefs or ways of acting. Conversely, routines create novelty through actor’s faulty reproduction of practices (Czarniawska, 2008; cf. Westenholtz, Strandgaard Pedersen & Dobbin, 2006).

Transcending conventional oppositions like stability-change, internal-external, imitation-innovation (Sevón, 1996), Scandinavian institutionalists emphasise local variations and interpretations of institutional elements (Czarniawska & Sevón, 1996) and rely on one

mechanism to explain how such ideas are shaped in an instantiation (Callon & Latour, 1981; Suárez & Bromley, forthcoming): the translation.

2.1. *Framing the institutional elements: a preliminary step*

However before implementing this translation mechanism *per se*, actors – both individual and collective – need to define the institutional frame in order to better comprehend and predict the environment they have to comply with (Snow, Rochford, Worden & Benford, 1986) to provide legitimacy to the instantiation they want to build. Indeed, “frames are important to the act of translation” (Boxenbaum, 2006: 940).

Adapting Goffman’s concept of the “schemata of interpretation” (1974, 21), the frame is mainly a cognitive construction. It helps actors to understand and interpret institutional ideas by suggesting possible symbolic ways in order to respond to given contextual challenges (Campbell, 2005). Actors “do not passively perceive their environment. Instead, they actively sift through information, construction and applying meaning to their surroundings” (Litzky & Maclean, 2008: 1138).

Such a cultural-cognitive frame emphasises and shapes the perception of actors’ reality and informs them of what they can legitimately implement (Elliott, Hayward & Canon, 1998) following dedicated resources and agenda (Lukes, 1974). In that sense, the cognitive frame enhances both belief systems and practices that predominate the social order (Dobbin, 1994) as the cognitive element, *i.e.* pillar, rules the other two – regulative and normative – in terms of taken-for-grantedness mechanisms (Philipps & Malhotra, 2008). For instance, institutional framing leads to decision-making behaviours affecting various stakeholders because it gives them a specific and collective purpose (Baucus & Rechner, 1995).

But as it is an interpretative model that takes on decisions, a frame can both unify, divide and may have consequences on the materialisation of such ideas (Beasmish & Biggart, 2012). Entailing more active struggles over meaning and resources whose structures can be intertwined (Hoffman & Ventresca, 1999), a frame “akin to strategic framing, is

endogenous to a field of actors and is subject to challenge and modification” (Lounsbury, Ventresca & Hirsch, 2003: 72).

Framing is thus “a dynamic and evolving process” (Benford & Snow, 2000: 614). A frame can be transformed or reframed (Zald, 1996), as well as it may circulate (Wedlin, 2007), e.g. across countries (Boxenbaum & Battilana, 2005), and consequently has consequences on the cognitive orientation of actors (Fiss & Zajac, 2006).

To conceptualise an instantiation, actors may construct and then materialise the frame by means of artifacts that disseminate and define symbolic elements among them (Gioia & Chittipeddi, 1991; Weick, 1995). However, the question of what constitutes such a frame and related empirical evidences are still missing in the literature (Cornelissen & Werner, 2014).

2.2. From the frame to the artifact: the translation

Itself translated from a notion developed by philosopher Michel Serres, the translation process stresses both movement and transformation actions and how ideas travel across time and space (Sahlin & Wedlin, 2008). Through the translation process, institutional ideas, *i.e.* the constructed frame, are interpreted depending on the context and can take on various forms (*cf.* Hwang & Suárez, 2005).

For instance, to be conveyed, ideas may be translated into objects (Czarniawska & Sevón, 2005), which *de facto* become carriers, or instantiations, of a particular institution (Scott, 2003). Actually, more than an idea or a practice as such, it is rather their materialisation that circulates (Sahlin & Wedlin, 2008). As actors can build objects, ideas are materialised in order to fit both actors’ wishes and specific circumstances in which they operate (Czarniawska & Joerges, 1996).

If new meanings are created, the involved actors allocate and reformulate previous ones in light of the present circumstances (Sahlin-Andersson, 2001; Sahlin-Andersson & Engwall 2002). As Hargadon and Douglas argue, translators “must locate their ideas within the set of existing understandings and actions that constitute the institutional environment yet set their innovations apart from what already exists” (2001: 476).

In such a process, where the existing institutional ideas co-construct new ones, a translation is more of an editing process as the frame is reshaped by actors to end uncertainty (Sahlin-Andersson, 1996). An edition is an *ad hoc* rational reformulation that can alter both the form and content of an instantiation (Suárez & Bromley, forthcoming).

For the Scandinavian institutionalists, there are no explicit rules to follow when implementing such a dynamic mechanism. At least, it is performed according to institutional settings, which emphasise institutional elements that have been followed and thus acted as a rule-pattern. At a micro-level, a translation does not follow a “clear intention and established techniques among the editors” (*ibid*, 2008: 225).

Moreover, despite the actors’ different interpretations and practices and how ideas circulates within the same institutional order, the interpretation of the frame – and its constituents – remains the same among them, as does the meaning of the instantiation (Mazza, Sahlin-Andersson & Strandgaard Pedersen, 2005).

Ultimately, SCI recognises that translation is fundamentally important to carrier institutional ideas through the help of actors who are considered as “merchants of meaning” (Czarniawska-Joerges, 1990; Suárez, 2007).

2.3. *Beyond the translation of meaning: the question of the material construction*

Even though SCI has adequately analysed the process of how actors input meaning to an artifact, and more especially how it can lead to a unique and collective instantiation interpretation, the question of the material construction of such a carrier continues to be “relatively unexplored” in institutionalist literatures (Lawrence & Suddaby, 2006: 245; Powell & Colyvas, 2008). Yet, this question remains central, especially when actors try to maintain or repair the institutional ideas while playing with the material components of an instantiation (Bechky, 2008; Nicolini, Mengis & Swan, 2012).

For this purpose, the presence and the important nature of artifacts in the durability of the institutional elements and legitimacy have already been studied and confirmed (Blanc & Huault, 2014; Monteiro & Nicolini, 2014).

In these institutional studies, actors use artifacts to stabilise and respect the existing institutional order while both responding to novel practices (Jones, Maoret, Massa & Svejnova, 2012) and translating into objects the relevant symbolic and cultural values (Rafaeli & Vilnai-Yavetz, 2004). *De facto*, since they enable agency, artifacts “lend themselves to a structuration perspective” by producing different effects on practices and organisations (Scott, 2013: 177).

By focusing on the actors’ practices in such a kind of institutional maintenance process (Gawer & Philipps, 2013), scholars demonstrate how they use artifacts to instantiate an established institution “that facilitate the transition between past habits and the elaboration of new habits for the future” (Lawrence, Leca & Zilber, 2013: 1028). Indeed, they analyse to what extent the stability of a frame is achieved through its transformation or modernisation, *i.e.* its reframing, while reaffirming the existing institutional legitimacy (Quinn-Trank & Washington, 2009; Currie, Lockett, Finn, Martin & Waring, 2013) and, more interestingly, by using material resources (Patriotta et al., 2011). Such a process actually operates as the reallocation of institutional resources, which are thus limited (Leca & Naccache, 2006).

Consequently, as the SCI literature completely overlooks how an instantiation, *i.e.* an artifact carrier, is tangibly built by actors but partially focuses on the practice of sense-giving to artifacts, the understanding of how the material resources, whose assembly helps thus to build such an artifact (Jones et al., 2013), are selected and implemented is essential, especially in such a symbolically but also materially constrained institutional context which needs to be accounted for.

This is why I decided to elaborate my analysis with the notion of bricolage in order to provide a relevant explanation of the processes of selection and combination of such resources that enable the materialisation and stabilisation of the institution.

3. The Bricolage

3.1. *The Bricolage in Organisational Studies (OS)*

The notion of bricolage has been transposed to organisational studies since the mid-1990s. However, it strongly emerged after the studies of Strandgaard and Dobbin (2006), Duymedjian and Rüling (2010), and recently Boxenbaum and Rouleau (2011), which better illustrate this transposition.

Initially in OS, bricolage highlighted how actors, individual or collective, are able to resolve an issue – innovate – from limited resources and with a lot of constraints. The interest of bricolage lies in Penrose's assumption (1959) that actors combine and use the resources of their repertoire, both human and material, in order to design as many solutions as possible, e.g. services, products or organisational or social structures.

An organisation is unable to detect all the possibilities its resources give to it. Consequently, an organisation can provide different solutions with the same resources and know to what extent it can use them to survive or stand out from others organisations depending on the context and its will (Mishina, Pollock & Porak, 2004).

Over the last twenty years, a lot of scholars have focused on the bricolage with various approaches (cf. Duymedjian & Rüling, 2010): through improvisation (Weick; 1998; Cuhna, Cuhna & Cuhna, 2000), symbolism – where actors decrypt and put the world in order according to material and human constraints (Linstead & Grafton-Small, 1990) –, sensemaking (Weick, 1993), entrepreneurship (Philipps & Tracey, 2007; Baker & Aldrich, 2000), technical systems (Ciborra, 1992; 1996; Orlikowski, 2000), or through the institutional lens.

Here, organisations are built with “bricks” found in the institutional environment (Meyer & Rowan, 1977; Glynn & Abzug, 2002) by the bricoleur to provide legitimacy to their construction (Boxenbaum & Rouleau, 2011; King, Clemens & Fry, 2011). Such bricks can be artifacts (Rao, Monin & Durand, 2005) or organisations themselves (Perkmann & Spicer, 2014) with their associated ideologies and imprints. Moreover, institutional bricolage can be used as a tool to understand to what extent hybridisation of institutional

logics is possible and how this leads to the collective creation of an organisational identity (Højgaard Christiansen & Lounsbury, 2013).

Following all these different approaches, Baker and Nelson try to summarise them into a broader one. Indeed, they define bricolage as “making do by applying combinations of the resources at hand to new problems and opportunities” (Baker & Nelson, 2005:333).

From that definition, an in-depth explanation is needed:

- “making do”: i.e. more of an action-oriented and problem-solving approach than a focus on persistent questioning on how to achieve solutions. Actors do not stop pushing and testing the conventional and institutional boundaries;
- “resources at hand”: these can be physical artifacts/objects, skills, and ideas but also cheap or free resources that others actors may see as unnecessary (*ibid*, 2005: 336). Additional resources in the immediate environment can also be considered as a resource at hand (Duymedjian & Rüling, 2010), e.g. existing objects such as leftovers elements of a building that actors can directly manipulate (Faulconbridge, 2013);
- “to new problems and opportunities”: to meet institutional, historical and technological transformations (Garud & Karnøe, 2003) and innovate using existing resources (Ciborra & Lanzara, 1990).

However, while the notion of bricolage is attracting growing interest from scholars, without totally questioning previous works or at least having a critical perspective on them, it is necessary to clarify my own approach in order to explain to the reader where I stand and continue the study while underlining where I try to contribute in the bricolage literature. The philosophical idea of the current study is to analyse, through dedicated theoretical and empirical contexts, the interactions and the blending of “old” and “new”. Beyond the translation of meaning to an artifact, my aim is to understand to what extent such instantiations are materially built. This is the reason why I choose the perspective of Lévi-Strauss’ bricolage, which emphasises both meaning and material components and how actor intertwine them both by means of her resources at hand.

3.2. *Intertwining the bricolage roots and its contemporary views*

French anthropologist Claude Lévi-Strauss introduced the notion of Bricolage in his seminal book *The Savage Mind* (1962/1966) in the chapter The Science of Concrete. Here are the highlights as defined by the author (*ibid*, 1962: 30-37).

Qualified as an “original” more than a “primitive” science, bricolage is ruled by the principle that the bricoleur always and only uses what is “at hand” whatever the task she has to achieve. According to a heteroclite, sometimes extended, but limited repertoire of resources, the actor crafts a material outcome, which embodies myths, *i.e.* knowledge and meaning, while continuously interacting – dialoguing – with all the resources present to inventory the possible solutions to which they all give access to.

3.2.1. The resource and the repertoire

It is important to settle the question of what can be considered as a resource in the study as different types of resources exist in the bricolage literature within OS, taking inspiration from Lévi-Strauss’ work (*cf.* Table 3).

According to my decision to adhere as much as possible to the original text and idea of bricolage, in the present dissertation, a resource can be any of those identified by Lévi-Strauss – physical artifact/object, knowledge, myth, practice – and the network, as a bricoleur can nowadays no longer be alone regarding all the current political considerations (Di Domenico, Haugh & Tracey, 2010) or existing cultures in conflict (Harrison & Corley, 2011). The inclusion of multiple bricoleurs is also possible and matters simply because they have nothing to lose while helping each other to succeed in achieving a shared challenge, following a spirit of “Jugaad”, “Jeitinho”, “Kanju”, “Débrouillardise” or “DIY” (Radjou, Prabhu, Ahuja & Boillot, 2013), especially in a context of resource scarcity (Johannisson & Olaison, 2007). This ability to resolve an issue under constraint appears as an intellectual bricolage (Lévi-Strauss, 1962/1966).

The actor helpfully uses the resources she previously stocked because she thought, at the time of collection, that they “could always be useful”. The composition of the repertoire is actually the contingent result of all the opportunities the actors have to renew or enrich it.

Nevertheless, despite the closed instrumental universe and the associated paradigm, the bricoleur is able to implement numerous and diversified tasks, as the resources are not linked and defined through a specific project. Here lies the opposition with the engineer, who looks for or creates all the resources – e.g. raw materials or tools – he needs to succeed in a specific project (*ibid*, 2010).

Table 3. The different types of “resources at hand” in bricolage within OS

Type of resource	References
Physical Artifact / Object	Lévi-Strauss (1966) ; Lanzara & Patriotta (2001) ; Duymedjian & Rüling (2010) ; Rao, Monin & Durand (2005) ; Schneiberg (2007)
Knowledge / Know-how / Skill	Lévi-Strauss (1966) ; Garud & Karnøe (2003) ; Boxenbaum & Rouleau (2011)
Myth	Lévi-Strauss (1966), Meyer & Rowan (1977), Chao (1999), Campbell (2004)
Practice	Lévi-Strauss (1966) ; Baker (2007) ; Mair & Marti (2009) ; Di Domenico, Haugh & Tracey (2010) ; Desa (2012)
Network	Baker & Nelson (2005) ; Oliver & McKague (2009) ; Duymedjian & Rüling (2010) ; Dacin, Dacin & Matear (2010)
Structure	Ciborra (1996) ; Lanzara (1999) ; Cartel (2013)
Technology	Lanzara (1999) ; Garud & Karnøe (2003)
Organisation	Stark (1996) ; Perkmann & Spicer (2014)
Identity	Weick (1998) ; Chao (1999) ; Strandgaard Pedersen & Dobbin (2006) ; Glynn (2008)
Institutional Logic	Glynn & Lounsbury (2005) ; Reay & Hinings (2009) ; Højgaard Christiansen & Lounsbury (2013)
Culture	Douglas (1986) ; Harrison & Corley (2011)
Digital	Rüling & Duymedjian (2014)
Ethics	Zahra, Gedajlovic, Neubaum & Shulman (2009)

To face an uncertain situation, the bricoleur needs pre-existing codes that she has already stored and can communicate with others. And to resolve the challenge she faces, the bricoleur initiates a dialogue with her resources and starts acting retrospectively by understanding what she can or cannot implement regarding the “meaning” embodied in the various items of her repertoire. In that sense, beyond its technical and material features, in a “mythopoetic” way, bricolage enables the mix of symbols through resources alchemy (Lévi-Strauss, 1962/1966).

3.2.2. The dialogue

Following Lévi-Strauss (1962/1966) and Duymedjian and Rüling (2010), who are the only ones that try to explain it, the dialogue remains the process that enables actors to choose which resources in their repertoire can be assembled in a relevant manner to face the current challenge. Through the combination of resources, the aim of the bricoleur(s) is to define and materialise a “functionally performing structure” (*ibid*, 2010: 138) that can resolve the current issue she/they face(s).

More than a combination, actors arrange the resources and do not transform them, because “if the bricoleur realizes that a given object does not fit into the structure, he has the possibility of putting a different element instead” (*ibid*, 2010: 138). By doing so, this confirms the on-going process of testing and replacing resources – if needed (Garud & Karnøe, 2003).

According to Duymedjian and Rüling (2010), the dialogue is thus a mode of acting that can be assimilated to the “reflexive conversation” of Schön and Wiggan (1992), *i.e.* the extent to which the mobilisation of a space composed of heterogeneous resources leads to the emergence of action (*cf.* Nonaka & Konno, 1998; Schatzki, 2002).

It stops when the bricoleurs are satisfied with the outcome, *i.e.* when the proposed arrangement satisfies the bricoleurs’ intention whatever the final cost or level of quality (*ibid*, 2010; *cf.* Simon, 1997).

3.2.3. The outcome

Yet the bricoleur cannot do anything she wants as these resources are governed by a prestressed regime due to the fact that they acquired a myth from previous uses, thus limiting new combinations. Indeed, she needs to checklist all the theoretical and empirical knowledge and the technical means she has in order to design a feasible and acceptable solution. This is the reason why such an outcome form is referred to in the literature as an “objective hazard” (Lévi-Strauss, 1962: 35) or “curious hybrid” (Lanzara & Patriotta, 2001: 959).

In addition to these constraints, bricolage results, which thus may be both unexpected and brilliant, always bring a new arrangement of resources whose nature does not change either they are used as a tool or included in the final construction (Duymedjian & Rüling, 2010). In this recombination, the items become the means after being an end, and the choice of one solution leads to a modification of the output, which itself leads to a new solution, etc.

This entails that the material outcome is always a compromise regarding the primary intention, as it depends on the available resources to constitute it and what the bricoleur thinks it should be. Besides, this recursive phenomenon enhances the poetry of bricolage as the bricoleur not only executes but “talks” with and also through objects in which she puts a little bit of herself, the symbolic reflexion being also a form of intellectual bricolage.

By taking-for-granted the fact that science is built on the interaction between the structure, *i.e.* knowledge, and the events, bricolage produces conjunctive structures through the use of events or pieces of events, *i.e.* “odds and ends” that act like witnesses of the human or social history. *De facto*, it can help to repair them or elaborate new ones by playing with original(s) meaning(s) and symbol(s) (Lévi-Strauss, 1962/1966).

To sum up, the bricoleur maintains or creates such structure through existing environmental elements; whereas the engineer creates new elements thanks to the existing structure. Finally, four major characteristics emerge from Lévi-Strauss’ book:

- 1) do with what is at hand, *i.e.* in stock;
- 2) by recombining resources, which can be materials, myths, technologies;

- 3) resources which retain their own uses and identities in case of dispersion;
- 4) and give rise to new and previously unknown propositions with new features whose number is limited.



To easily illustrate bricolage, let us imagine what actors can do with a square box like this one.

Following different situations, such a box can have different – but still limited – uses: as a storage area, its initial function, but also as a small table or footstool if it is strong enough. With several square boxes, an actor can construct a library by stacking them or design an original lattice

by coupling them. A side of this type of box can replace a broken car window, although it is impossible to replace water pipes with, even by rolling it. Finally, if the actor owns a sharp tool, she could make an opening and transform the box into a ballot box.

3.3. The collective bricolage

Even though the bricoleur's activity was solitary in Lévi-Strauss' works, the management literature describes a collective activity as it involves organisations in a contemporary context (Duymedjian & Rüling, 2010) and thus introduces the use of ties or networks as a complementary form of resource at hand (Hull, 1991).

In fact, such a process is interactive and social and is not the preserve of a single individual (Baker & Nelson, 2005).

Indeed, collective bricolage mutualises the resources of all actors, via the dialogue they implement with their individual resources. They achieve a shared objective by crafting a unique outcome that differs according to which resources actors decide to use and succeed in intertwining (*ibid*, 2010).

Within such a given institutional context, if the challenge is shared among actors, there is collective bricolage. Yet, this notion has to be settled too.

Widely praised by the literature that currently takes-for-granted the obvious collective aspect of the process, such collective bricolage leads to a momentum (Hughes, 1983) thanks to the accumulation of resources provided by multiple actors. They are both distributed and embedded as they engage in a process where their practice are shaped by the environment they define at the same time they implement their actions (Garud & Karnøe, 2003).

Duymedjian and Rüling (2010: 143) define collective bricolage as follows:

“that is more than the ex-post connection of separately constructed arrangements demands some degree of sharing between collaborating bricoleurs’ repertoires. This involves physically merging or providing mutual access to the bricoleurs’ individual repertoires. Access alone is not sufficient for appropriation, and it is difficult to imagine a process of joint bricolage without an extended time period of intense collaborative learning leading to the emergence of an at least partly shared repertoire on which the bricoleurs draw as if it was personally constituted by each of them. In order to make collective bricolage possible, bricoleurs will also need to engage in a joint dialogue with their resources”.

If a close exposure to the material environment facilitates the collective bricolage, belonging to the same community of practices makes this type of bricolage more efficient (Weick, 1993) although the outcome becomes more unpredictable due to the iterations between actors (Odin & Thuderoz, 2010). Indeed the success of collective bricolage relies on the necessary good relations between all the actors.

Various things have an impact on actors’ relationships and dictate the level of collective bricolage. These are the differences between the time/space frame, the importance – or not – of negotiations, the access to each other’s repertoires, the constitution – or not – of a joint repertoire, the degrees of open-mindedness regarding the institutional context that enables or constrains actions and the “degree of tolerance concerning the utilization of objects” (Duymedjian & Rüling, 2010: 145).

3.4. *The bricolage in a neo-institutionalist context*

Through an institutional lens, bricolage is rooted in the idea of path dependency and it is argued that the construction of the outcome is “more evolutionary than revolutionary” (Højgaard Christiansen, 2013: 29). Bricoleurs recombine “available and legitimate concepts, scripts, models, and other cultural artifacts that they find around them in their institutional environment” (Douglas, 1986: 66-67).

Actors use bricolage to avoid environmental constraints and resources limitation and to shape a legitimated outcome with a shared and recognised identity (Gioia, Schultz & Corley, 2000; Rao, Davis & Ward, 2000) – both material and human resources and also institutional elements, e.g. norms or rules, can be considered as constraints.

However, in such an institutional context, their actions are predictable. Indeed, actors are not able to deal with resources that are outside their community of practice. Yet routine or learning remains impossible when such embedded organisations handle multiples challenges at the same time, known as the coexisting period (Brown & Duguid, 1991).

To counter-strike these constraints and as bricolage shapes “both what seemed desirable and feasible”, actors see their resources as an intrinsic opportunity (Stevenson & Jarillo, 1990: 23) to deal with their current challenges. Bricolage is thus the process of discovering the opportunities while enacting the relevant resources (Baker & Nelson, 2005).

To craft a material and legitimated outcome, the actors – the bricoleurs – assemble different resources thanks to “trial-error” tests (Garud & Karnøe, 2003). They submit and call into question their proposals if the resources they manage and intertwine are implemented in an inappropriate manner regarding their given purpose. As a consequence, the improvisation scheme underlined by Miner, Bassoff & Moorman (2001) and Baker, Miner and Eesley (2003), where the conception and the realisation of the relevant solution are one single action, is rejected.

When a jolt (Meyer, 1982; Greenwood et al., 2002) affects both the institution and its instantiations, bricolage enhances bricoleurs to remain more creative under pressure. They can recombine existing resources for new purposes in order to respond to environmental changes, thanks to unusual use of those resources. Using bricolage as a

mechanism of legitimation (Desa, 2012), the actors assert their desire to defy the institutional constraints, especially when their aim is to modernise an instantiation while respecting the institutional elements it embodies.

Because such combinations are easily replicated, the bricolage is “much more important as a tool of value creation than as a tool of value appropriation” (Baker & Nelson, 2005: 362).

Finally, bricolage underlines a dynamic where actors apply combinations and arrangements to new problems and opportunities in order to achieve a specific goal that could have consequences on an institution (Cleaver, 2002). Furthermore, as many scholars have suggested recently (cf. Lawrence et al., 2013), through the interaction actors had with the materials they intertwined, the tangible outcome coming from this addition of symbolic institutional resources can also be seen as a result of bricolage (cf. Hargadon & Sutton, 1997; Déjean, Gond & Leca, 2004 in Cartel, 2013).

3.5. *The question of the bricolage process*

More generally, the process of bricolage itself needs to be highlighted either it involves one or several actors.

Indeed, even though scholars have tried to define all its main features, there are still very few papers that explain how bricolage functions and what its underlying mechanisms are (e.g. Boxenbaum & Rouleau, 2011; Perkmann & Spicer, 2014). More specifically what is still unknown is how actors are able to use and arrange all the resources they have at hand and how they can collectively initiate such a selection, such a dialogue between them which “starts from the moment the bricoleur is confronted with an objective or a practical function to be fulfilled” (Duymedjian & Rüling, 2010: 137).

Indeed, even though bricolage has been increasingly used within OS, the focus is mainly put on the process of resources intertwining (Boxenbaum & Rouleau, 2011; Højgaard Christiansen & Lounsbury, 2013; Perkmann & Spicer, 2014) or on how bricolage can help entrepreneurship through the ability and/or requirement of using limited constraints

(Baker & Nelson, 2005; Zahra et al., 2009; Di Domenico et al., 2010): the question of the dialogue and its associated dynamic has been paradoxically overlooked.

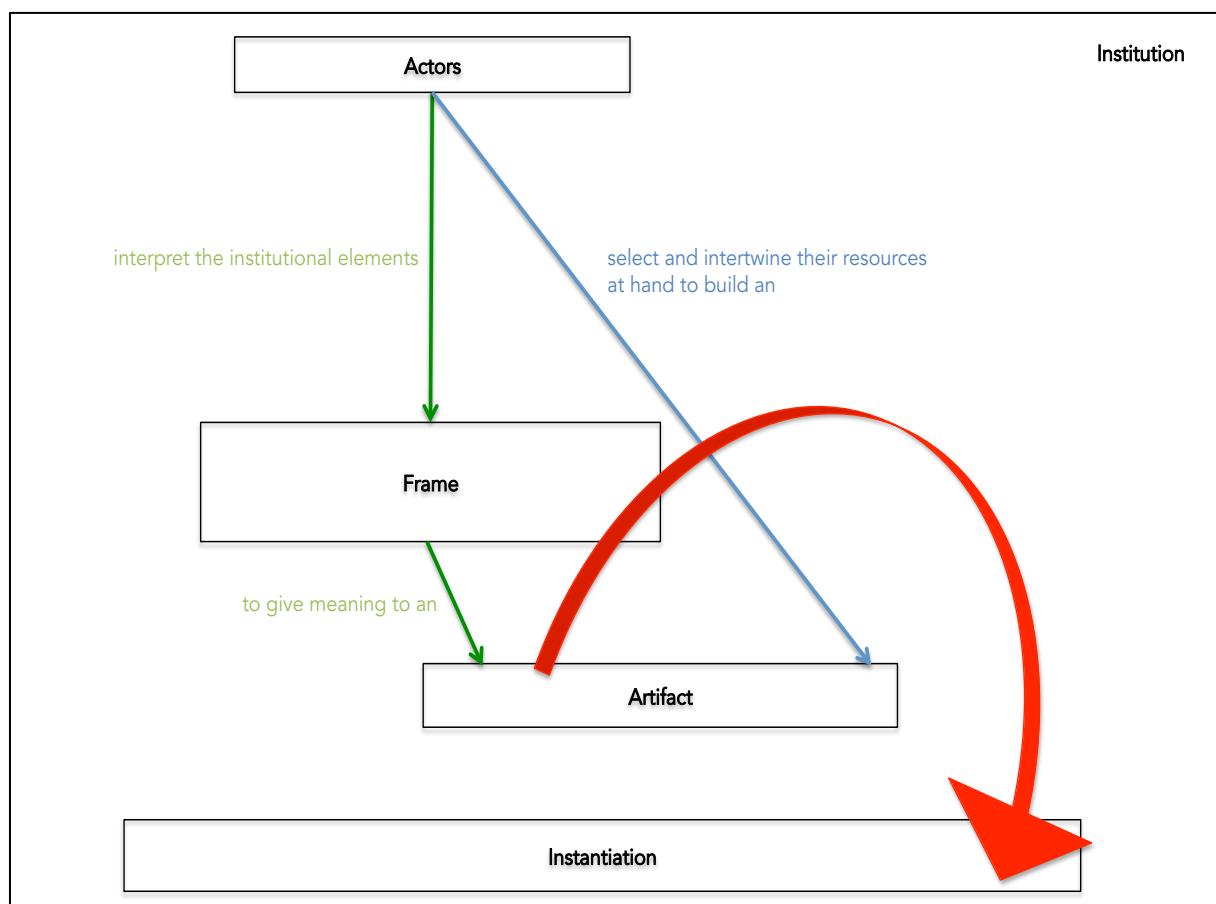
As the number of resources in the repertoire is limited, the action of dialogue has certain boundaries, as does the set of combinations. A first one is the limit provided by the social order, e.g. the cultural behaviours of a country that only allows and accepts certain types of action. The outcome needs to be legitimate in regards to the items' associated meanings. Such action can also be constrained through time and space (Lévi-Strauss, 1962/1966). For instance, in Baker and Nelson (2005), the construction of a new business model is seen as a way to survive in case of a jeopardised organisation that has to quickly find a solution. In Cleaver (2001), it is the institutional context of the Tanzania country that explains, depending on its usable resources, how conflicts are resolved and how it enables cooperation.

These limits implicitly emphasise the question of resources selections as the dynamic of negotiations between bricoleurs has been overlooked except in Innes & Booher (1999). This issue needs to be addressed especially because such a decision is collectively grounded and multiples actors – and *de facto* multiples repertoires – can lead to new propositions and choices (Kreiner, Jacobsen & Jensen, 2011). This may also introduce compromises between actors following their heterogeneous interests (Kreiner, 2012).

Whether or not scholars can explain how the resources are chosen and mobilised, by extension, it is the decision-making model of bricolage that is totally absent within the management – and more especially the institutionalist – literatures. This can be explained by the specific and historical focus on the improvised type of action (Ciborra, 1996; Baker et al., 2003; De Vaujany, 2011) and on the non-material outcomes far removed from the material ones highlighted by Lévi-Strauss (Stark, 1996; Chao, 1999; Baker, 2007; Glynn, 2008). Nevertheless to understand how an outcome – in my case an instantiation – is materially built, the analysis of the dynamic of bricolage is essential, *i.e.* the understanding of how such a process is implemented, how the resources are selected to craft such a material outcome and how a decision is made among actors who have the same objective to be fulfilled.

Through the analysis of the interactions between actors and artifact, the perspective of the study is therefore to intertwine two mechanisms together: one that gives a meaning, coming from institutional elements, to an artifact, with another that enables the selection of resources to construct/modify such an artifact that respects this collectively built meaning through their combination. The major aim is therefore to understand the materialisation – *i.e.* the construction – of an instantiation and to theorise it (cf. the red arrow in Figure 2).

Figure 2. A pictured theoretical framework



PART 2 – RESEARCH DESIGN

The Part 2 focuses on the research design of the doctoral research. It establishes the link between the theoretical framework and the empirical data through the constructivist Grounded-theory methodology I use and detail in Chapter 3. In Chapter 4, I express why I chose the Listed-Buildings Institution empirical context and why specifically these six listed buildings. In Chapter 5, I introduce to the reader how I collected and analysed the data.

Chapter 3: My Research Paradigm

Like any scholar on a research journey – with a lot or little experience – I need appropriate philosophical assumptions to develop valid knowledge out of a given study. Then, the choice of a paradigm matters as it is used as a conceptual framework or tool that enables, within a single community, a shared understanding of the nature and the events observed and analysed by scholars (Kuhn, 1970). A paradigm acts as a net that guides both the researcher's reflections and actions (Guba, 1990: 17). It relies on three dimensions, named ontology – *"what is the nature of reality?"* –, epistemology – *"what is the relationship between the inquirer and the known?"* – and methodology – *"how do we know the world, or gain knowledge of it?"* (Denzin & Lincoln, 2000: 19).

For my dissertation, I chose the interpretive paradigm as it demonstrates how particular realities are socially produced and maintained through institutional elements (Deetz, 1996). In the study, as reality is analysed through the construction of meaning among actors, I specifically use the constructivist interpretive paradigm while practicing a constructivist grounded-theory methodology through a qualitative study (Charmaz, 2014). Within that perspective, my role was usually an attempt to capture the complexity that characterised the nature of the studied phenomenon and to describe its complexity and ambiguity with as many facets as possible (Justesen & Mik-Meyer, 2012). All Chapter 3 is about that.

1. The constructivist paradigm

Developed against the Auguste Comte's positivism which asserts that there exists "out there" an objective reality independent of what individuals perceive, constructivism emphasises the importance of the interaction between the knowing subject and the observed object in knowledge construction (cf. Piaget, 1937) and hence denies the existence of one single reality (Le Moigne, 1995).

Indeed, constructivism embraces relativist ontology and argues that multiple realities exist through the knowledge and meanings individuals experientially create to interpret the world in which they find themselves (Burrell & Morgan, 1979: 3). Furthermore, because constructivists view these realities holistically as they are integrated and dependent on other systems, e.g. discourses or institutional structures (Lincoln & Guba, 1985), reality is seen as a social construction that is the result of actors' intertwined interpretations (Berger & Luckmann, 1967). Constructivist research analyses what events and objects mean to people, how they perceive everything that happens to them and around them, and how they adapt their behaviours (Rubin & Rubin, 1995).

This paradigm provides different answers to the questions of who or what builds reality (Collin, 2003)⁷. Either it is everyday social actors themselves who steer and control this building process, or it is the researcher who helps to construct the reality he tries to study with the support of "languages, consciousness, shared meanings, documents, tools and other artifacts" (Klein & Myers, 1999: 69), which provide him with the context or the institutional structure that individuals talk about (*ibid*, 1967). In that sense, constructivism adopts subjectivist epistemology. The object of study and the researcher – including what he already knows – are here linked together and cannot be separated, as the latter remains open-minded to new knowledge throughout the study and lets it develop with the assistance of his various interlocutors coming from the field.

Therefore, by accepting that such a reality is interactive and participative, knowledge is constructed, multiple, ephemeral and always emerging and changing (Reason &

⁷ The Foucault's answer, which downplays the human role as actor and subject in the construction processes, is not addressed in this study. For Foucault, both subjects and objects are created by discourse.

Marshall, 1987). Knowledge is socially constructed rather than objectively determined because there is no objective knowledge that is independent of thinking and reasoning humans (Gephart, 2004). Knowledge is more an act of interpretations. Yet, this produced knowledge is inevitably tainted by the way the researcher previously saw it because such a construction heavily depends upon the presuppositions he had on the object (*ibid*, 1995). *De facto*, constructivism implies that reality is not independent from the understanding of the researcher.

Within this paradigm, which is concerned with understanding the world as it is from individuals' subjective experiences, phenomena are contingent: they are historically or socially conditioned (*ibid*, 2003). It is therefore important to put analysis in context because meaning and knowledge are irrelevant without a proper frame because it gives to the researcher the tools to understand what he sees (Hudson & Ozanne, 1988).

By doing so, the constructivist paradigm heavily relies on naturalistic methods which are commonly implemented as part of a qualitative approach. Such a methodology remains the most relevant way to describe phenomena in their context while providing a better interpretation and thus understanding of what the researcher sees. For instance, by means of interviews, texts analysis or observations, a qualitative study ensures an adequate dialog between the researcher and the individuals with whom he interacts in order to construct and highlight a meaningful reality from the research process (Justesen & Mik-Meyer, 2012).

Finally, an important objective of this approach is to demonstrate that reality always consists of constructions that could have been different depending on the actors present. Unlike positivism, the task of constructivism is thus to challenge the idea that everything has a specific and true classification while focusing on the on-going and actual classification process (*ibid*, 2012); this is why findings can be usually presented in the form of grounded theory (*cf.* Lincoln & Guba, 2000; Charmaz, 2000).

2. The grounded-theory methodology (GTM)

2.1. *The origins and main characteristics*

Developed historically by Glaser and Strauss (1967) as a “reaction to extreme positivism that had permeated most social research” (Suddaby, 2006: 633), the grounded-theory methodology (GTM) is a practical method that focuses on the interpretive process by analysing the “actual production of meanings and concepts used by social actors in real settings” (Gephart, 2004: 457). Through GTM, the researcher describes and makes sense out of events observed in an empirical world by means of field notes, interview transcripts and documents that give him the tools to conceptualise what he discovers (Denzin, 1989). Unlike the hypothetico-deductive research approach, GTM goes from empirical elements to the definition of concepts, whose interactions lead to categories and afterwards to theory, i.e. a set of well-developed categories that forms a theoretical framework that explains some social phenomenon (Strauss & Corbin, 1998). According to Maxwell (1998), theory’s ability is to tell a story that will enhance a better understanding of some aspect of the world.

Such a methodology is particularly useful and consistent with organisation studies and its associated processes for the following reasons (Locke, 2001): it captures the complexity of a context in which action happens, it creates a good link between the theorisation to practice, it supports the theorising of new substantive areas, and enlivens mature and already existing theoretical frameworks. Even though the elaboration and generation of a formal theory out of it may be possible, GTM fosters empirical substantive theory. While relating both theories through the dynamic that substantive theory provides the bases to elaborate a formal one, Glaser and Strauss defined both theories according to the level of generalisation they enable:

“By substantive theory, we mean that developed for a substantive, or empirical, area of sociological inquiry, such as patient care, race relations, professional education, delinquency, or research organizations. By formal

theory, we mean that developed for a formal, or conceptual, area of sociological inquiry, such as stigma, deviant behaviour, formal organization, socialization” (1967: 32).

Recognised as the most relevant methodology to generate such a substantive theory, the GTM’s essential principle remains the rejection of *a priori* theory (*ibid*, 2001), *i.e.* scholars do not have to enter the field with pre-conceived hypotheses in their mind regarding their data gathering and analysis (*ibid*, 1967). Indeed, doing so could obstruct the development of theory. However, because it is almost impossible to apprehend a field without general guidance (Bulmer, 1979) – which is moreover not recommended – they need to have pre-conceived knowledge and some orientations in terms of theoretical perspectives (Glaser, 1978).

GTM mostly relies on two principles (Suddaby, 2006): the *constant comparison* and the *theoretical sampling*.

The first allows the researcher to simultaneously collect and analyse data. The appeal here is to identify the contrasts that may come out between the emerging categories.

The second determines what data the researcher needs and should collect next regarding the theory he is trying to construct. Therefore, theoretical sampling is a principle used to refine data rather than increasing the sample size (Charmaz, 2000).

Nevertheless, two other principles exist and are as essential as the previous ones for the researcher to implement such a methodology.

There is the *coding* through which the researcher labels, compiles and organises his data treated as potential indicators of concepts. These indicators are constantly compared with each other to emphasise the relevant ones (Charmaz, 1983). There are three types of codes that lead to the elaboration of categories: *open coding* – data deconstruction and categorisation –, *axial coding* – categories associations – and *selecting coding* – maturing the selected category (Strauss & Corbin, 1990).

The last principle is *theoretical saturation*. This is the process that links coding and data collection. Data collection ends when a category is judged relevant and robust enough to test theoretical ideas and when additional data are no longer needed to enlighten the concept. Beyond the opinion of the researcher’s peers, such judgement is made

according to the respect of some Grounded-Theory evaluation criteria such as the credibility, the originality and thus the usefulness of the findings and contributions (Charmaz, 2014).

With the aim of designing social process theories, GTM was originally developed to study micro-level processes. By using it, scholars look for patterns of behaviours or meanings but also variations in their application around a substantive problem by the sampled actors in order to underscore and explain what they observe through a resulting dynamic – or more rarely, static – model (Glaser & Strauss, 1967).

2.2. *The constructivist grounded-theory*

In the dissertation, I used a constructivist grounded-theory methodology (Charmaz, 2014), which departs from the classic (e.g. Glaser, 1978) and the Straussian grounded theories (Strauss & Corbin, 1990). Following a constructivist stance, the modern GTM “assumes the relativism of multiple social realities, recognises the mutual creation of knowledge by the viewer and viewed, and aims towards an interpretive understanding of subjects’ meanings” (Charmaz, 2003: 250). This aim, which takes into account all participants’ discourses and stories, dismisses the goal of the classic stream of GTM, which focuses more on the understanding of social behaviours and whereby unit of analysis is not the persons themselves but incidents in the data (Breckenridge, Jones, Elliott & Nicol, 2012).

Within this modern GTM, neither data nor theories are discovered. The scholars are rather part of the world they study and the data they collect; they “construct grounded theories through their past and present involvements and interactions with people, perspectives and research practices” (Charmaz, 2014: 17). Indeed, data and analysis are co-constructed in the interaction between the researcher and the participant (Charmaz, 2006). In this sense, the constructivist GTM tends to be closer to the classic one which takes into account the researcher’s perspective as a data to analyse *per se* and not as a bias (Glaser, 1998). However, because they assume relativist ontology (Charmaz, 2014), constructivism grounded theorists look for a theoretical product that does not focus on a

core category (Martin, 2006) as they consider multiple perspectives rather than a primary concern – which is what classic GTM does, while providing a useful and relevant theory for the participants that could be discussed and modified (*ibid*, 1998). As Charmaz sums up: “[constructivist] grounded theory serves as a way to learn about the worlds we study and a method for developing theories to understand them ... [which] assumes that any theoretical rendering offers an interpretative portrayal of the studied world, not an exact picture of it” (2014: 17). *De facto*, the main difference between the two approaches lies in the treatment of data, which must be apprehended without a preconceived theoretical lens in classic GTM because of its neutral epistemological and ontological perspectives (Holton, 2007). On the contrary, constructivist GTM allows pre-frames lens through which data are processed (*cf.* Glaser, 2005; *ibid*, 2012).

3. So why do I choose to use a constructivist GTM?

As a newbie researcher, I wanted to apprehend my 3-year-long academic journey while putting myself within the field I studied. Without adopting a research-action stance (Hatchuel & Molet, 1986; David, 2012), my wish was to interact with the main actors in order to better understand what they do and how they do it and thus gather data and develop the analysis through shared experiences and my relationships with the participants, but also through other sources of data (Charmaz & Mitchell, 1996; Bryant, 2002) – which I will detail later in this part. Regarding my interest in understanding “*how the old and the new are intertwined*”, my choice to use a constructivist GTM was relevant because it remains the best practice to answer such a “how” question (Charmaz, 2014). Also, adopting this methodology allows me, as a researcher, to express and theorise my view, as the resulting theory is an interpretation that cannot be separated from this personal dimension regarding the constructivist stance. This is the reason why different scholars will not come up with the same theory at the end of the GTM process even though they study the same field with the same preliminary ideas (Clarke, 2012). Such a GTM is moreover useful to make explicit how actors construct meanings and actions in specific situations and to highlight to what

extent such constructions are embedded in institutions, (hidden) structures, networks, etc. (Clarke, 2005). In particular, this is how the constructivist approach enhances how things are maintained in such a configuration that encouraged me to adopt a constructivist GTM to implement my study (*ibid*, 2014). Besides, I am above all interested in the reflexivity stance let by GTM and the leeway given to the researcher in terms of research processes and products (Thorne, Jensen, Kearney, Noblit & Sandelowski, 2004). Indeed, both data and analyses, *i.e.* the social constructions enhanced by the grounded theorist, “occur under pre-existing structural conditions, arise in emergent situations and are influenced by the researcher’s perspectives, privileges, positions, interactions and geographical locations” (*ibid*, 2014: 240). Because I wanted to question my preconceived ideas or standpoints while shaping an objective model on the chosen topic, such a GTM emerged as the most relevant tool to mutualise all the different perspectives – from those of the participants to mine, which may affect the starting point and the conduct of the research – into an overall interpretation that can act as a new reality among others. In that sense, through my Ph.D. work, I try, or at least hope to be engaged in the field in order to increase knowledge of a studied phenomenon (Van de Ven, 2007) that interested me in the first place, while answering a sociological and empirical concern – *i.e.* here the modernisation of the listed buildings. *De facto*, using such a methodology appeared as a challenge that made this research adventure even more exciting. To explain – and anchor – my decision to select a constructivist GTM, I introduce in Table 4 the summarised constructivist points made by Charmaz (2014: 320) while coupling them with my personal stance and how I have dealt with each during the thesis period.

Table 4. My constructivist stance (from Charmaz, 2014: 320)

Charmaz's properties	My properties
Grounded-theory process is fluid, interactive and open-ended	My wish was to pick a flexible methodology that would allow me to be reflexive regarding the iterations between the data and the analysis.
A general research topic informs initial methodological choices for data collection	As my research came from a personal exploration, the choice of the methodology was the starting point of the research.
Researchers are part of what they study, not separate from it	While discovering a field I did not know, I spent time mastering my knowledge of the field through readings, conferences and discussions with professionals.
Grounded theory analysis shapes the conceptual content and direction of the study	The first data gathered in Denmark were used as a primary analysis that was extended thanks to the data later collected in France.
The emerging analysis may lead to adopting multiples methods of data collection and to pursuing inquiry in several sites	I used multiple data sources to increase my understanding of what I was trying to analyse and to triangulate the emerging findings.
Successive levels of abstraction through comparative analysis constitute the core of grounded theory analysis	This is the reason why I picked and studied six cases with other examples to support them.
Analytic directions arise from how researchers interact with and interpret their comparisons and emerging analyses rather than from external prescriptions or from inherent meanings in data	The choice not to implement a comparative study is due to this property. Indeed I thought it was the best way to generalise the same interpretation that emerged between the two countries.

Chapter 4: The Empirical Context

The next chapter motivates my choice to select the Listed-Buildings Institution as my empirical field and gives a broader definition of it. Chapter 4 also introduces to the reader the six different cases I studied during the academic research.

1. The choice of the empirical field⁸

My field study was conducted on the topic of the institution of historical monuments, or as I will name it in the dissertation the *Listed-Buildings Institution*. This field was not the first empirical field I choose for my Ph.D. Indeed the museographical sector, which currently experiences an increasing introduction of digital devices into its interpretative mediation department, was my first topic of study (Colombero, 2012). However, regarding my new theoretical orientation within the neo-institutionalism and my consideration of the decoupling phenomenon (Boxenbaum & Jonsson, 2008), I quickly realised that such a topic of study was not the best case to discover and highlight what I really wanted to understand, *i.e.* the mix between the old and the new which led all my reflections since my first academic work in the music industry, where I analysed how the vinyl medium could help the on-going dematerialised industry with MP3 and streaming (Colombero, 2011). To be intellectually honest, I also found very tricky to be up-to-date and to follow the evolutions of the digital industry that moved, and keeps

⁸ With the term *field*, I mean “organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products” (DiMaggio & Powell, 1983: 148).

moving rashly. The risk to be overwhelmed by empirical information appeared to me as too difficult to handle to develop a relevant research question.

To select the new field, the things felt into the place when I attended the workshop *“Debating Responsible Innovation in Built-in Renewable Energy and Architecture”* organised by the Observatory for Responsible Innovation at MINES ParisTech in November 16th 2012. Following the different lectures, the question of how one’s can integrate sustainable development elements into existing buildings – that was introduced during the day by Nicole Biggart from UC Davis, California – challenged me so much that I decided to focus on this topic. Consequently, as I found the “new”, I needed to choose an “old” element to my study; this is why I picked the listed buildings for the question of their modernisation seemed paradoxical and thus interesting.

Moreover, I found that this sector was the most atypical field to discover a real case of Bricolage because the actors needed to deal with the existing building and its materials to think and build the new version of the building that thus embodies both “old” and “new” elements in a simultaneous material manner. Enhancing the scholars’ knowledge on Bricolage, because it remained relatively unexplored at the time I started my thesis – as I explained in the previous part – quickly became my main objective.

2. The Listed-Buildings Institution (LBI)

Beyond the shared popular leitmotiv *“Heritage always comes first”* that rules the LBI, as most of my interviewees explained to me, the major aim of this institution is to legally protect buildings with architectonic or historical qualities highlighting some national meaning. Historically, the roots of the LBI can be traced after the 1789 French Revolution when the French State created the first Monuments Commission on December 16th 1790 to select and list the buildings that deserved to be transmitted to future generations (Sire, 2005). From 1794, at the time of Abbé Grégoire and his writings on the necessary protection of the collective Heritage to thwart vandalism, to 1837, when Prosper Mérimée was active and the first Historical Monuments State Department was created, the French have ceaselessly addressed the issue of cultural Heritage protection,

acting as the forerunners in terms of protection measures and inspiring the rest of the world (Balsamo, 1997).

From the 18th and until the mid-20th century and throughout Europe, the approaches regarding monuments protection and building works evolved in three phases coming from their preservation to their improvement (Jokilehto, 1986).

As old as the society itself, the first period focused on the historic/memorial and symbolic values of the building. For the people, who showed no real concern for its material substance, only the maintenance of the monument's function mattered. Then, inspired by the Italian Renaissance, the second period saw an enhancement aesthetics values and the quest to illustrate particular moments in the nation's history by freezing their buildings in time – which mostly imitated ancient works as they acknowledged a strong civilisation. During that period, the original architects' intentions were always highlighted and respected in case of works even though they were not built at the time of construction (*cf.* Viollet-le-Duc interventions in the 19th century).

However, restorations (first phase) were often considered more perilous for the authenticity of the monument than conservation (second phase) based on the respect of the original material (*ibid*, 2005). This is why the last, and still on-going, period mainly questioned the material relevance of the building over time. Ruskin's writings (1849) gave way to this debate as they explained that it is impossible to reproduce an object with the same significance in another historical-cultural context. The aim of that period was to re-evaluate "the authentic object while preserving its historic stratification and original material and avoiding falsification" (*ibid*, 1986: 7). The concept of anastylosis, *i.e.* the addition of contemporary elements to complete an original object while showing what it is "old" and what it is "new", quickly emerged as a solution. Despite its implementation, the over-use of faithful restoration exceeded original stratifications (*cf.* Sir Georges Gilbert Scott) and, following the fashion of the time, led to stylistic interventions and integrations of modern materials. Even though such practices became officially accepted over time – and created some, and still contemporary, arguments such as that on restoring restorations⁹ – Camillo Boito (1893) suggested a conservative compromise and

⁹ For instance what should architects do to renovate the City of Carcassonne, which was totally restored by Viollet-le-Duc in the 1860s?

argued in favour of the construction works' actors implementing a historical-critical evaluation of the building while considering all its significant historic phases plus its aesthetic aspects and allowing the reintegration of previous work when they were relevant regarding the new program.

Accordingly, this principle shaped the *frame* of authenticity that the institution tries to protect, promote and regulate, because – as I am going to analyse in the next part – designing such authenticity is empirically difficult but necessary to list and thereafter maintain the building within the LBI when intervention works happened. Nevertheless, it also laid the foundations of the Heritage Charter most used by the LBI all around the world: the Venice Charter, *i.e.* the International Charter for the Conservation and Restoration of Monuments and Sites (1964). Indeed as it summarised (*ibid*, 1964:1):

“Imbued with a message from the past, the historic monuments of generations of people remain to the present day as living witnesses of their age-old traditions. People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common Heritage. The shared responsibility to safeguard them for future generations is recognised. It is our duty to hand them on the full richness of their authenticity”.

In the 19th century, at the same time as this change in approach, public figures like Victor Hugo (1825), Ludovic Vitet or Prosper Mérimée criticised the interventions made by various incompetent people. By doing so, they implicitly requested official legislation to avoid uncertain and disastrous works and destructions but also the involvement of dedicated architects in the task of both highlighting and respecting the building's authenticity in case of interventions. This was here a matter of building legitimacy because the monument needed a formal institution to protect it, so it could act as its *instantiation*. Indeed, as its material representation, it would picture its practices, its rules and its symbols and convey the protected authenticity stating its status from the opinion of the wider public (*cf.* the previous part).

Such laws thus emerged between the mid-1800s and early 1900s – for instance, the Danish Law for Church Protection (*Lov om kirkesyn*) of February 19th 1861, the English

Ancient Monuments Protection Act of 1882 and the French Historical Monuments Law of March 30th 1887, finalised on December 31st 1913. They included protection measures and also competent experts to tackle the questions of listing and intervention. However, even though “it shows a beautiful optimism with penal measures, legislation is not enough [...] the preservation of ancient monuments is primarily a mindset” (Choay, 2007: 111) more than a systemic process.

Nowadays, both old and modern buildings can be listed according to different levels or labels of protection. In France for example, a building can be protected either under the registration or classification systems. Registration is a weaker and intermediary type of protection but because “*the preservation philosophy remains identical*” as one State architect explained to me, I will not make any difference in the dissertation. Preservation applies to some or all parts of the building and a dedicated Cultural Public Office (CPO) manages it and approves alterations in case of intervention works, such as renovation or extension; or at least gives advice on what should be done to shape and respect its authenticity. *De facto*, the *contemporary adjustment* or modernisation issue is under the responsibility of numerous actors: the dedicated CPO architects¹⁰, the chosen architecture agencies, the client – who is most of the time the building operator or the appointed project manager –, the protection societies, the patrons/sponsors, etc. If it was unconceivable to add materials that would impair aesthetics until the end of the 1970s, the emergence of new ideas, such as sustainable development ones 20 years ago, set a new deal up and led to new institutional pressures (Rouillard, 2006). While the architects working on listed buildings still do not legally have to respect the new norms, e.g. green policy, and enjoy many exemptions, it is their appreciation that determines whether or not they should take them into account. And because some voluntary measures are expected to take effect as mandatory in a closed future and also as the interest in green¹¹

¹⁰ The architects associated with such CPO will be named “CPO architect” or “State architect” in the dissertation.

¹¹ Green or Sustainability has to be understood here in terms of efficient energy consumption and building survival over time while providing a decent quality of life and comfort to users.

building from the clients and patrons¹² keeps growing, most listed buildings which undergo construction works are nowadays upgraded according to contemporary ideas.

3. The LBI in Denmark and France

For my Ph.D., I studied the LBI through different listed buildings in two different countries: Denmark and France. My prior objective when I began was to conduct a multiple and comparative case study research to build theory (Eisenhardt, 1989). On the one hand, because of the worldwide recognition of its architecture and its environmental awareness, I opted for buildings in Denmark. I selected that country because when I entered the field, I chose the integration of sustainable development elements to picture the integration of new elements or materials and to analyse contemporary adjustments in listed buildings. And on the other hand, I chose listed buildings in France, where the philosophy of Heritage protection was originally developed (Jokilehto, 1986).

However, regarding my research question and after I came back to France to carry out the French data collection, I quickly noticed that their cultural Heritage preservation approaches were quite similar and that sustainable development consideration was not as relevant and different as I expected it to be between the two countries while studying listed buildings' modernisation. Because, it just remains an example of contemporary adjustments, I therefore decided to use both countries to improve my generalisation potential and to reach theoretical saturation (Charmaz, 2014).

Besides, beyond respect for authenticity and how they designed it, they both based the Heritage protection on the values conveyed by the respect for a balance between a building's essence and its materials. To picture this balance, one architect pointed out that in Germany for instance, whatever the material used and "*the value of the age of the material*", only the essence of the building is important. The Germans could therefore replace hand-cut stone with 3D-printed plastic stone, which would be impossible in Denmark or France "*where if [material] does have any value to anybody you can talk*

¹² For instance, the Realdania foundation, which is one of the best known patrons in Denmark, has just released a guideline book *Realdania 2050* highlighting what Denmark should have achieved by then and underlining the need for Sustainable Development in the construction field.

about Heritage". 9.000 listed buildings are currently listed in Denmark¹³ and 43.000 in France¹⁴ from small pavilions to industrial facilities and castles. The latter are protected through the Danish Act on Listed Buildings and Preservation of Buildings and Urban Environments (2011) and through the French Historical Monuments Law (1913) codified in the Heritage Code (2014).

One of their major and similar rules is that all building works, which affect a listed building, require a permit from a State authority; listed building's owners or operators cannot do what they want with its and have to respect the protected values and authenticity. Any change therefore has to be approved by a competent Cultural Public Office (CPO). In France and within the DGP, *i.e.* the Heritage National Department, this is handled by the CRMH (the Regional Office of Historical Monuments Curator), the DRAC (the Regional Office of Cultural Affairs) or the CNMH (the National Commission of Historical Monuments); while in Denmark it is the Kulturstyrelsen, *i.e.* the Board of Cultural Heritage (BCH), which does that.

4. The case selection and the six cases

Under several selection criteria, a preliminary step was to choose the type of buildings I should focus on. First, the building had to be listed regarding the legislation and still used with the same function it was built with or protected for. The interest was here to stay away from the topic of adaptive re-use, whose literature is saturated¹⁵. Then it must have undergone intervention works, such as renovation and/or extension, and some new or sustainable materials had to be integrated into the building during these construction works. The access to the field, and to the actors present during the project, had to be relatively easy; it is the reason why buildings belonging to private owners, or the Danish Royal Family for instance – as some of them were considered at the beginning of the study, like the *Eremitageslottet* (the Eremitage Hunting Lodge) –, were discarded.

¹³ Cf. <http://www.kulturstyrelsen.dk/english/cultural-heritage/listed-buildings/>

¹⁴ Cf. <http://www.culturecommunication.gouv.fr/Politiques-ministerielles/Monumentshistoriques/Qu-est-ce-qu-un-monument-historique>

¹⁵ "Adaptive reuse is the process of changing a building's function to accommodate the changing needs of its users" (Rathmann, 1998: 58).

Finally, the actors working on the chosen buildings had to try to succeed with the aim of maintaining the LBI features. According to these requirements, I decided to study three listed buildings located in Copenhagen between October 2013 and March 2014¹⁶ and, following what I discovered and what I needed to explore further, three in Paris between July 2014 and January 2015.

All the cases I picked followed the “information-oriented selection” from Flyvbjerg’s typologies (2006), *i.e.* what were the more relevant cases to handle the empirical challenge? In Denmark, I selected three different types of cases. I chose Nyboder as a paradigmatic and critical case, Sølvgade Skole as a maximum variation case and Munkegård Skole as an extreme/deviant case. The appeal here is that cases enhance the opportunity to explore the same phenomenon in various circumstances (Yin, 2013).

In France, I practiced a parallel selection regarding what I needed to generalise and in-depth understand after my Danish data collection and analysis. Therefore, I chose the French Pantheon as a similar case to Nydoder regarding the strong important national Heritage message it conveys; the École des Mines/Hôtel de Vendôme as a maximum variation case like Sølvgade Skole because the contemporary adjustments are thought in regards to the overall original building and surroundings but not directly changed the appearance of it. And finally, the Molitor swimming pool is an extreme/deviant case because, like Munkegård Skole, it implied a serious and dramatic transformation of the original structure.

All cases are summarised in Table 5. I briefly introduced them to the reader below.

Table 5. The type of the selected buildings (from Flyvbjerg, 2006: 230)

Name of the Building	Country	Type of Case	Purpose
Nyboder	Denmark	Paradigmatic / Critical	To establish a common knowledge for the domain in order to allow deduction
Sølvgade Skole	Denmark	Maximum Variation	To obtain various and new information on the studied field
Munkegård Skole	Denmark	Extreme / Deviant	To enhance generalisation through unusual cases and achieve a representative sample
The French Pantheon	France	Paradigmatic / Critical	Similar case to Nydoder
The École des Mines	France	Maximum Variation	Similar case to Sølvgade Skole
The Molitor swimming pool	France	Extreme / Deviant	Similar case to Munkegård Skole

¹⁶ This time period corresponds to the Copenhagen Business School visiting I completed as part of my double degree program.

4.1. Nyboder

In Copenhagen, the first building I picked is Nydober, which is actually a housing estate dedicated to the personnel and students of the Royal Danish Army and their family. Built in 1631 next to the Øresund – the strait between Denmark and Sweden – at the time it was the best location to quickly assemble the troops to march to the ship in case of imminent enemy attack coming from the sea. Imagined by King Christian IV, Nyboder reveals a specific rhythm given by buildings' rows – which were the first strip of buildings with small flats in the whole of Denmark – creating the feeling of an infinite repetition (cf. <http://nyboderdok.dk/>).

Picture 1. Nyboder in three pictures



The architectural shape was also designed to unify crews while on land to facilitate their following maritime missions. Indeed, living at the end of the row, the captain could control his shipmen as they returned from town – often drunk – and then avoid turbulent behaviours, such as fighting, as they were obliged to pass by his apartment. In the event

that his men annoyed him, he could seek revenge while on the boat together for at least 8 months, something they were all aware of. Nicknamed “De Gule Stokke”, i.e. the yellow blocks, these houses are well-known all around Denmark and are very popular in Danish culture: e.g. references to Nyboder can be found in the written works of Andersen (cf. the 1851’s tale *Hyldemoer*) or Kierkegaard. The area has been listed since 1918¹⁷ mainly because of its architectonical and historical values (cf. Referat 21/04-2005). Relatively untouched since that period, and even though it looked homogeneous from the outside, Nyboder faced various issues from simple building maintenance to complete obsolescence.

To resolve the mould and water ingress problems, but also to add a kitchen and bathroom to every flat, the Ministry of Defence asked for a complete restoration through the implementation of a pilot project that initially started in 1999 and ended in February 2014. This project focused on only two rows of Nyboder. By doing so, the stakeholders’ aim was to find the best way to reflect the balance between a preservation of values and modern requirements; the idea was therefore to highlight Nyboder’s Heritage while increasing the quality of life and the comfort of the inhabitants. According to the Forsvarets Bygnings- og Etablissementstjeneste press release – i.e. the Public Office that manages Danish Ministry of Defence’s buildings –, architects needed to respect the Nyboder’s protected values while taking their inspiration from the overall impression of the area from the houses themselves to their in-between gardens and streets.

4.2. *Sølvgade Skole*

Also in Copenhagen, the second building I studied is the Sølvgade Skole – the Silver School in English. Built in 1847 by the Danish architect P.H.C. Hagemann, the building is the oldest primary school of the whole country that is still currently functioning. This is why it is introduced as the school that “never gives up” (Siemsen, 1997). Nowadays, it employs 41 people and accommodates 430 pupils from Year 0 to 9

¹⁷ The official information related to the listing of all Nyboder buildings can be found in the website of the Danish Cultural Public Office:
<https://www.kulturarv.dk/fbb/sagvis.pub?sag=3099763>

(cf. <http://soel.skoleporten.dk/sp>). Inaugurated by King Frederik VII in 1848, he compared the late classical construction to a castle because he found it so elegant and incredibly posh regarding the “no-noble” kids that would study in it. As Hagemann was the builder of the first five local schools in Copenhagen, Sølvgade Skole served for a long time as the architectural model for the city’s later schools. Because the school has educational elements from the mid-1800s – the metal gate that separates the street and the schoolyard, the flagpole and the acacia tree – which emphasise significant cultural values associated with the architecture of such a former school complex, it was completely listed, and thus protected in 2006¹⁸ (cf. Referat 15/06-2006). Sølvgade is located within a historical but small area near Nyboder, the Kongens Have, *i.e.* the King’s garden, and the Rosenborg Castle. Modernist buildings, such as Dronningegården, are also located within that neighbourhood.

Picture 2. Sølvgade Skole in three pictures



¹⁸ The official information related to the school listing can be found on the website of the Danish CPO: <https://www.kulturarv.dk/fbb/bygningvis.pub?bygning=3181233>

However, because of this location, the school suffered from a lack of space and modern facilities. Also, beyond the on-going problem Copenhagen is facing in terms of necessary spaces for schoolchildren, the issue of the increasing number of newcomers in the city every month forced the municipality to invest in new schools 12 years ago, or at least in new places in existing schools. Out of 100 newcomers per month, 10% are children. *De facto*, from 2009 to 2012, architects renovated Sølvgade Skole and designed an extension taking inspiration from the forms and colours of the surrounding buildings. The aim was to provide a modern and lively twist to the new building and thus new rooms for kids for both studies and extracurricular activities, e.g. sports facility or a food lab. In addition, with the shape of its distinctive coloured double glass façade, the new building boasts low energy consumption (68 kWh/m²/year), high insulation and optimal indoor climate. As Lone Wiggers, the C.F. Møller architect that handled the extension works, testified: *“the idea was to create a building that speaks the language of children – colourful and musical, while at the same time ensuring that the building respects its historical surroundings”*.

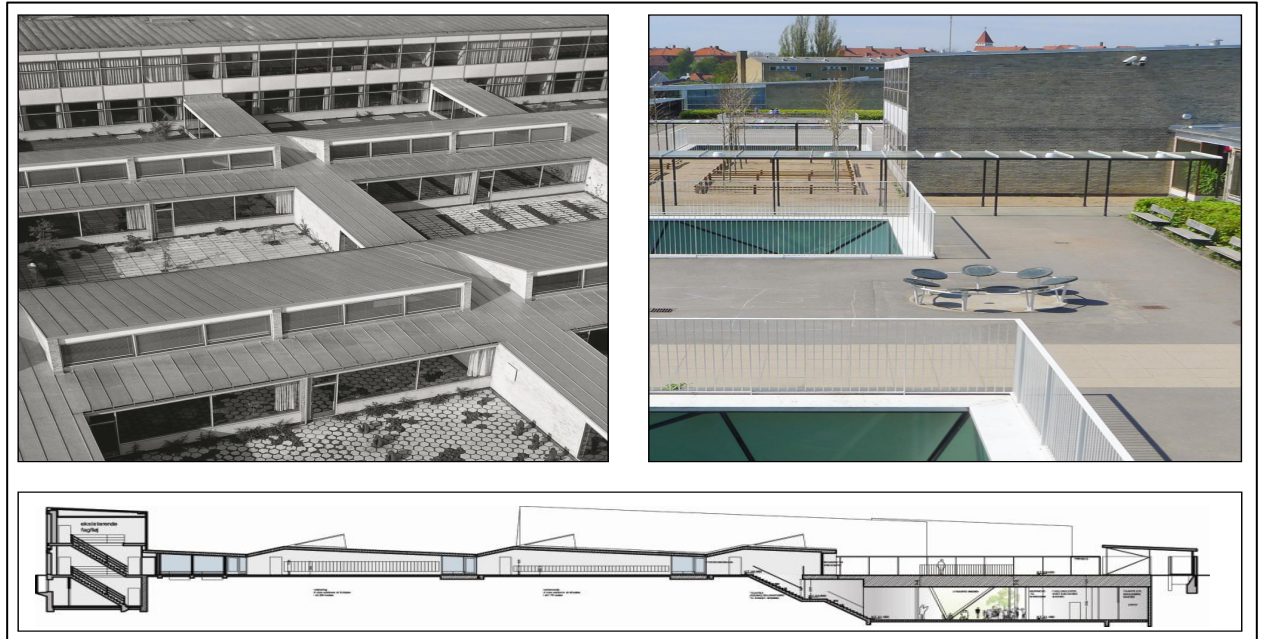
4.3. Munkegård Skole

The last Danish listed building is also a primary school located in the city of Gentofte, part of Copenhagen’s suburbs. Munkegård Skole remains one of the first single-storey schools in Denmark (cf. <http://munkegaardsskolen.skoleporten.dk>). Designed by the world-famous Danish architect Arne Jacobsen, the school was built between 1954 and 1956 and was listed in 1995¹⁹. At that time, the building was considered as a “gesamtwerk” or “complete work”, i.e. Arne Jacobsen designed everything from the overall structure to the detail of fittings, furniture and garden plans. Originally, the school’s structure was based on a grid with four rows that integrate 24 (day)lit classrooms, arranged 2 by 2, each with their own private and peaceful small courtyard garden (Skriver, 1957). The school was protected because it is still considered

¹⁹ The official information related to the school listing can be found on the website of the Danish CPO: <https://www.kulturarv.dk/fbb/bygningvis.pub?bygning=3797942>

as Jacobsen's architectural masterpiece in terms of school buildings *per se* but also as an example of the high quality standards in the public construction during the 1950s.

Picture 3. Munkegård Skole in three pictures



Because the Danish CPO refused to remove this protection in 2003 (*cf.* Referat 19/11-2003) architects had to find a solution to answer the municipality's wish in 2000 to add new teaching demands to project-based learning facilities, but also IT and climate improvements in the classes. Moreover, they had to deal with the wear and tear suffered by the school over the years. In respect of several conditions (*cf.* Referat 19/05-2005), Dorte Mandrup Architects found the solution to renovate old classrooms, build an underground "ground-floor extension", and integrate a removable library into the old Assembly Hall. These three different types of construction works were completed between 2007 and 2009. While taking care of the old shapes and patterns, such as the respect for Jacobsen's original colour scheme, the architects assumed and emphasised three majors aims (Gentofte Municipality, 2013):

- restructuring the school's functional disposition to suit contemporary use,
- additions of furniture in regards to the school's "essential nature",

- renovation and extension through a new building to provide a more coherent school structure.

The whole works promptly included: the installation of sliding doors between classes, the addition of indoor toilet facilities, the laying of four large prismatic atria which provide daylight to the extension but also open air facilities, the creation of new furniture, etc.

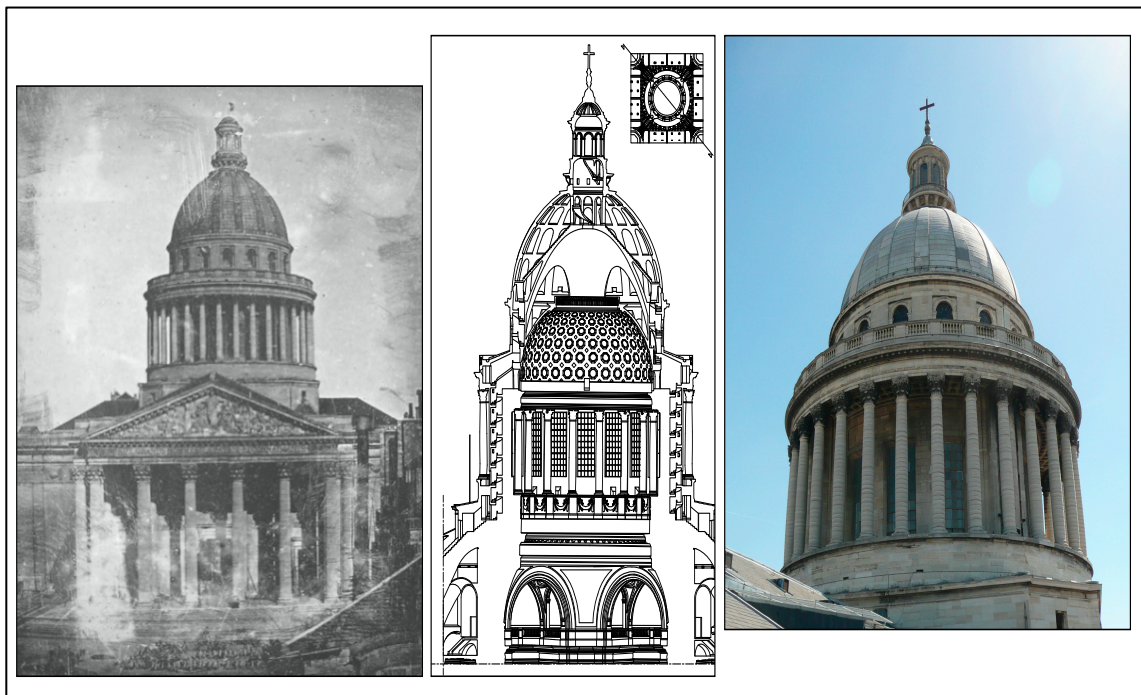
4.4. The French Pantheon

The first building I studied in France is the French Pantheon settled in church of Sainte-Geneviève, the patron Saint of Paris. Fathered by Louis XV, the monument was initially built by Jacques-Germain Soufflot in 1764. However until the end of its construction in 1791, two others architects worked on it. Indeed, after Soufflot's death, Jean-Baptiste Rondelet pursued his works and then, after the French Revolution in 1789, Quatremère de Quincy transformed the building into a cenotaph, where France's *Grands Hommes* would be promoted, by sealing the apertures (Wallon, 1903). While the building oscillated between its religious and lay functions throughout the 19th century, an order published in the French *Journal Officiel* on May 26th 1885 after Victor Hugo's death, ended this battle once and for all: the Pantheon was established as the Nation's non-religious memory. Listed in both 1920 and 2008²⁰ for that reason, the building today embodies an important patriotic message formulated by Philippe Bélaval in 2013 (Bélaval, 2013), Head of the Centre des Monuments Nationaux (CMN), which owns the building, and supported by French Republic President François Hollande. His aim was to promote the principles of the French Republic through the building while increasing its attractiveness – in 2012, the Pantheon welcomed 725.000 visitors (cf. <http://pantheon.monuments-nationaux.fr>). As several interviewees told me, there is an anecdote about the never-ending works undergone by the building. Because of "its exaggerated height" (Viollet-le-Duc in Quinet, 1883: 87), which caused structural problems, the story goes that since the day of its opening, the Paris society urged itself

²⁰ The official documents related to the French listing buildings protections can be found on the Mérimée Database: http://www.culture.gouv.fr/public/mistral/dapamer_fr?ACTION=NOUVEAU

to visit the place as soon as possible because people said that it could fall down at any moment. To try to definitely resolve this on-going issue caused by the main arches' in-between thrusts, but also to resolve several recurring problems such as the inadequate impermeability or the erosion of the metallic armature, an immense building works program was implemented simultaneously with Bélaval's recommendations²¹ (*ibid*, 2013). Over a ten-year period from 2012 to 2022, the Europe's largest intervention works on listed buildings started with the project of the Dome and the upper lantern restorations. This first step, which ended in 2015 for the last Pantheonization, focused on renewing the lead covering, laying wire hoops and checking existing stones and sculptures for their possible replacement and renovation, etc.

Picture 4. The French Pantheon in three pictures



²¹ There are 20 recommendations in the document ranging from to the central role the Pantheon should play in the life of the French Republic (e.g. the development of cultural or honorific events inside the building) to the necessary inclusion of women for the future Pantheonizations.

4.5. *The École des Mines – The Vendôme Hotel*

The second French building I selected is also a school named the École des Mines de Paris, located within the Vendôme Hotel. With Polytechnique, it is one of the most renowned engineering schools in France. On a field owned by the Carthusian Order, Jean De Courtonne and then Jean-Baptiste Le Blond constructed an initial version of the building in 1707 (D'Avilier, 1710). Between 1715 and 1718, the latter did a first extension following a request by the duchess Marie-Anne de Bourbon, who therefore gave her name to this private mansion. After many vicissitudes caused by the replacement of owners, the school integrated the building in 1816 after operating from different locations, either in Paris at the La Monnaie Hotel or outside, in Savoy for instance. To support its new function and after its acquisition in 1837 by the French State, the Hotel underwent two new modifications. The first between 1840 and 1852 by François Duquesnoy and the second one by Théodore-Henri Vallez due to the creation of the Boulevard Saint-Michel, which modified all field levels (Chesneau, 1932) and reduced its wings and its Cour d'Honneur – the courtyard of Honor. All these modifications are included and thus protected within the listing from 1994²².

Taking place in a four-year program of communication – between 2014 and 2018 – to enhance the school's fame, as well as its mineralogy museum, the renovation of the Conrad Schlumberger Lecture Hall appears as the spearhead of this overall movement of modernisation and highlighting. Why? Because this conference room is the most used by scholars to give lectures and to organise colloquium, but paradoxically it is also the most obsolete room regarding current educational standards and despite the prestigious engineer's name attached to it. Indeed, Schlumberger remains one of the most worldwide known alumni and professors of the École des Mines as he conducted within the school – in fact under the current lecture hall – his experiments on electric prospecting in 1911 (Robin, 2003). With the help of his brother Marcel, his researches led to the creation of the logging that appeared essential to discover metal ores and to

²² The official information related to this listing can be found on the website of the Mérimée Database:

http://www.culture.gouv.fr/public/mistral/merimee_fr?ACTION=CHERCHER&FIELD_1=REF&VALUE_1=PA00088508

implement geological studies or oil exploration. The brothers are both considered as the fathers of "exploration geophysics". Today's works – which are due to be completed for the bicentenary anniversary of the school's relocation in 2016 – should respect all the modern requirements needed, such as the MOOC²³ facilities, or just in terms of audience comfort, while emphasising the forerunner identity of the school with the use of new materials and techniques (cf. Building Works Program, 2014).

Picture 5. The École des Mines in three pictures



4.6. The Molitor swimming pool

The last building I analysed is a swimming pool named Molitor located in the chic west side of Paris. As a consequence of the 1920s athletic lobby that followed the 1924 Olympics Games in Paris (Roubaudi & Jorion, 2014), Molitor hatched within the stadium area and was surrounded by the *Parc des Princes* (Velodrome and now Football),

²³ Massive Open Online Course

Jean-Bouin (Rugby) and *Roland-Garros* (Tennis) – which is therefore still the case. Furthermore, because of its proximity with both the Longchamps and Auteuil racecourses, this place was frequented almost exclusively by Paris's high society. Built by Lucien Pollet in 1929 with two pools and in an Art-Deco style – with stained glass windows constructed by the master glassmaker Louis Barillet – the building was designed more as a leisure center than a simple swimming pool (cf. Rapport Philippon, 2005).

Picture 6. Molitor in three pictures



Consequently, Antoine Belverge, who managed it at the time, gave Molitor an atypical existence by integrating a tobacco shop, a bar, a restaurant, a skating ring in winter and even a hairdressing salon. As an iconic Parisian swimming pool, that enhances the imagination of artists²⁴, plenty of legends are associated with this building, such as the

²⁴ For instance, the name of the main character in the *Life of Pi* is a diminutive of Piscine Molitor (Martel, 2001). Recently a comic book, entitled *Piscine Molitor*, dramatises the death of Boris Vian

fact that the bikini was worn for the first time there (*ibid*, 2014) or the “official” reasons that led to its listing in 1990²⁵. While the official story is that the pool was listed because of its Art-Deco features, a more obscure one emphasises political and personal issues between Jack Lang and Jacques Chirac. The former, who was the Minister of Culture at the time, decided to protect the pool to avoid the latter, then Mayor of Paris, to destroy it and build a housing stock instead.

Administratively closed and abandoned in 1989, Molitor became a famous underground and street-art location in Paris, providing it with an extended-life surfing on the character of freedom and fun it had always highlighted. Indeed no one has ever restricted this new activity. In 2008, the Mayor of Paris, Bertrand Delanoë decided to launch a competitive tender to allow “the true rebirth” of the building (*ibid*, 2014: 6). The project, won by a team made up of the investment fund Colony Capital and the construction company Bouygues Immobilier, proposed its complete refurbishment as a resort while respecting its original function and the layout of the two pools.

After a lot of controversy regarding its entrance fees or the renovated building itself – as it was totally knocked down underlying a “Heritage imposture” (Cabestan, quoted in Pêcheur, 2012) –, Molitor re-opened in May 2014.

while practising apnoea in one of the two pools (Cailleaux & Bourhis, 2009); Vian quoted Molitor in *Froth of the Daydream* (1947).

²⁵ The information related to the swimming pool listing can be found on the website of the Mérimée Database:

http://www.culture.gouv.fr/public/mistral/merimee_fr?ACTION=CHERCHER&FIELD_1=REF&VALUE_1=PA00086713

Chapter 5: Data Collection and Analysis

Chapter 5 explores the way I collected data through the help of various qualitative research tools. I also underline how I analysed such data through the coding mechanism and according to constructivist grounded-theory methodology paths.

1. Type of data collected

Following a constructivist Grounded-Theory Methodology (Charmaz, 2014) and through these six cases, I collected four types of data to implement my study: archival data and documents, interviews, non-participant observations and also photographs. Indeed, to be relevant and robust, research based on case studies has to cope with diverse and rich data (Eisenhardt & Graebner, 2007) to reveal participants' views, feelings, intentions, and actions as well as the contexts and structures that rule them. With this GTM and its flexible guidelines, I could shape and refine my data collection to follow what emerged from the field – e.g. new questions – but also according to the theoretical development (Charmaz & Mitchell, 1996, Locke, 2001). The advantage of using such a methodology lies in the evaluation of the fit between initial interests and emerging data and the flexibility to pursue both personal ideas and those of respondents. Regarding data collection, constructivist GTM also has the advantage that small samples or limited data do not pose a problem (Stern, 1994) as this methodology aims to develop conceptual categories and “thus data collection is directed to illuminate properties of a category and relations between categories” (Charmaz, 2014: 33).

Firstly, to guide my empirical interests and to apprehend the field (Blumer, 1969), I followed the advice given to me by (in)formal participants, especially in terms of essential reading to constitute a framework of the field. *De facto*, I read several books that focus on Heritage History (e.g. Jokilehto, 1986; Sire, 2005), introduce old and modern guidelines of listed buildings restorations or renovations (e.g. Viollet-le-Duc, 1858-1872, Rouillard, 2006) and provide general architectural knowledge (e.g. Pérouse de Montclos, 1972). These sources helped me to define the ideas that became the starting point of my thoughts and to know how I could develop and interpret them by adding and analysing data.

After this preliminary step, I targeted an interview with the lead architect for every case. Then, in the next step, regarding what they told me during our exchanges, I asked for the contact information of people who appeared essential for the study. For instance in Nyboder, after I found the architects' information while hanging around the construction site, I contacted them. During the interviews, I asked for potential people I should and could be in touch with for my study. I then contacted them, interviewed them, etc.

1.1. The interviews

To explore a particular topic in-depth, interviews remain the most useful method for interpretive inquiry (Denzin & Lincoln, 2000). Based on an inter-subjective interaction that created new knowledge (Kvale, 1996), interviews are the place and the moment where the interviewer seeks to understand the topic while the interviewee shares her/his own relevant experiences to shed light on it (Fontana & Frey, 1994).

Following a constructivist perspective, the context of the interview plays a central role in the construction of processes as its outcome is a result of "socially situated activities" (Järvinen, 2005: 28) and because both interviewer and interviewee form their responses based on the interview situation. The aim here is to explore and not interrogate and thus to find the balance between asking significant questions and forcing responses (Charmaz, 2006). While adopting an "active interviewing" stance, the data generated is thus co-produced (Holstein & Gubrium, 1995).

In my case, I conducted 24 interviews with the main actors involved in these building works, *i.e.* with the architects and the closed stakeholders such as the clients, patrons, representatives in CPOs or some building or Heritage experts (*cf.* Table 6); the interviews remaining my primary source of information.

Table 6. List of Interviews

Interviewee's status	Building	Lenght
Architects	Nyboder	1h18min
Lead Architect	Nyboder	1h07min
Project Manager/Client	Nyboder	1h14min
Project Manager/Client	Nyboder	45min
Patron/Sponsor	Nyboder	1h26min
Lead Architect	Sølvgade Skole	48min
Lead Architect	Munkegård Skole	55min
Project Manager/Client	Munkegård Skole	1h22min
Pr. Of School History	Sølvgade & Munkegård Skolen	1h06min
CPO Architect	All Danish buildings	1h12min
Lead Architect	French Pantheon	1h04min
CPO Architect + Client/Building Operator	French Pantheon	2h33min
Project Manager/Client	Vendôme Hotel	55min
Architect	Vendôme Hotel	1h56min
Lead Architect	Molitor Swimming Pool	49min
Client/Building Operator	Molitor Swimming Pool	1h09min
Patron/Sponsor	All French buildings	1h26min
Head of one Protection Society + Pr. of Art History	All French buildings	1h10min
CPO Architect/Curator	All French buildings	1h14min
CPO Architect	All French buildings	1h50min
Archeologist/Heritage expert	All French buildings	1h49min
Former ICOMOS member	All French buildings	1h57min
Architect & Pr. of Art History	All buildings	1h13min
Head of a Protection Society	All buildings	1h40min

The interest here is to view the focal phenomenon from the perspectives of various actors (Eisenhardt & Graebner, 2007). I explained to them that I was studying the introduction of new materials into listed buildings and asked how they could integrate such materials without distorting the building's Heritage. This point was formulated as an opened-

question that was put to all actors but formulated differently depending on their position in the project (Gillham, 2005).

Besides detailing the context of the works and the histories of both the buildings and the companies responsible for the works, the interviews focused on three major themes:

- a first one on the listed building's intervention works in general and on how the actors decided what they could maintain and what they could change or how they imagined the modernised building,
- a second theme on how the organisation dealt with these kinds of works and on how actors interacted with each other,
- and a last one either on the integration of new materials and modern issues, such as sustainable development concerns, or on the question of authenticity and its creation.

The interviews lasted about an hour and a quarter and were conducted at the actors' workplaces or directly on the building sites. They were all recorded and transcribed manually, so I could add notes and mark all the participants' intonations, hesitations, etc. The interviews were semi-structured in order to generate new knowledge and to simulate interviewees' thoughts on the shortlisted themes that target well-defined problems or questions (Justesen & Mik-Meyer, 2012). This is the reason why I choose to ask as much "how" questions as possible in order to yield rich data. This type of interview provides the exchanges with "some structure, while allowing for some improvisation" (Myers, 2009: 125).

In terms of ethical concerns (*ibid*, 2005), I specified every time how I would store and analyse the data and how I would ensure anonymity. Also, even though it was authorised in each interview, I asked permission to use my recorder and explained to the interviewees that they could request a transcription. Finally, I outlined my publication strategy.

In terms of theoretical sampling and in order to reach theoretical saturation, the interview guides evolved in regards to the first results I gathered (Bryant & Charmaz, 2007). This is the reason why in France, I positioned my interviews less on sustainability and more on the listed building's authenticity than before. I also decided to interview protection societies while being open-minded to cases that departed from preservation of the

function. In the same vein, I was interested in the cases of the Saorge monastery located close to the French-Italian borders and the French Hôtel de la Marine, which both changed their function over time to survive.

1.2. *The documents: the archives or texts*

Beyond the preliminary texts I read to frame the field and my personal interests, I studied various documents in order to develop the analysis but also to triangulate and confirm what interviewees told me (Miles & Huberman, 1994). These texts are named *extant texts* because their creations are completely independent from the research itself or the researcher (Reinharz, 1992; Silverman, 2001). As Charmaz (2006) recommends, and because texts are never independent of their context, I did not assume that these texts mirror organisational processes but rather treated them as a way to provide evidence of their objectives. Archives also gave me insights into perspectives or practices not easily obtained through other materials – for instance information on similar buildings that I did not have the opportunity to study but which provide clues to push forward the analysis, e.g. the Suresnes primary school or the Parisian Grand Magasin La Samaritaine. With the texts, I did a content analysis and I mobilised the notion of *intertextuality* (Atkinson & Coffey, 2004) to emphasise the documents' network and so they would not be seen as isolated entities. In a constructivist sense, and because a document can hardly be said to have a stable meaning, the role played by context is again and hence important. However, the most appropriate documents are those that are able to highlight problems such that their analysis will generate new, compelling and interesting knowledge (Justesen & Mik-Meyer, 2012). Such documents helped me to categorise reality as it is contingent to meanings that could have been different (Bowker & Star, 1999).

The archival data I collected were mainly regulatory texts – for instance the Danish Building Regulation 10 or the French Heritage Code – all buildings' call for bids or proposals, architects' drawings, when were available and not confidential, and guideline documents on the studied buildings or on the field – for instance the Realdania 2050, which highlights Danish sustainable development policy, or three International Heritage

Charters published by UNESCO or ICOMOS (International Council on Monuments and Sites): the Athens (1931), the Venice (1964) and the Burra (1981) Charters. Besides, I identified and read specialised historical books, conference proceedings such as the Nara Conference on Authenticity published by the ICOMOS (1994) or old magazines where the buildings were described and narrated – e.g. the French periodical *Construction Moderne*. I also used newspaper articles and websites as they could be considered as traces of an organisation regarding its practices or routines (Joerges & Czarniawska, 1998). Finally, because I study the field of architecture, I decided the analysis would include photographic sources (cf. Harper, 2002).

1.3. *The photographs*

Regarding the chosen empirical context, to capture a relevant and true outlook of what happened while going beyond the language issues it is usual to undergo when implementing a case study between two countries (Harper, 1994), I tried to collect data through photographs. The appeal of using such a methodology is that I was not always able to experience how actors intertwine “old” and “new” materials in real time. Indeed, depending on the period when I collected my data, which sometimes took place after building delivery – some of them ended at least three years ago – I could not observe the different building works’ processes for each listed building. This is why during the meetings, in order to see all the arrangements they previously made on the buildings *ex post*, I asked the architects to show and explain to me what they had done on the building and how they did it. I then took pictures to illustrate what they explained. The idea to use such a medium was first to enhance my understanding of how actors integrate novel elements without impairing the embodied cultural Heritage. It also came from the fact that architects sometimes explicitly clarified what they did through sketches (Yaneva, 2005): studying pictures appeared to be as a good way to capture in the full scale what they drew for me.

The pictures I analysed were the ones I took during the study but also those I extracted from websites, architects documents or reports, etc. (Ray & Smith, 2012). Such a method

is used to tangibly track a process via the combination of historical and contemporary photographs (Buchanan, 1998; Sood & Pattison, 2006) but also to confirm what actors said during the exchanges (Venkatraman & Nelson, 2008). So to implement this, I conducted a thematic analysis (Vince & Warren, 2012) to highlight the “manifest and latent content” (Banks, 2007:47) regarding what interested me through comparison with other visuals – e.g. pictures took before the works – and with the discourses gathered during interviews.

Therefore, beyond the development of the emerging theory, the aim here was to analyse how actors materially worked on the listed buildings and to what extent their decisions on which materials they have to use can be perceptible and understood while looking directly at the building. The use of photographic research supports my main qualitative methodology, *i.e.* the data sources collected and analysed through my grounded-theory approach, *e.g.* interviews, written documents and observations.

1.4. *The observation: the participant-as-observer*

Last but not least, where possible, I also practiced observations in order to grasp informal and tacit knowledge (Polanyi, 1966). Following an ethnographic posture, the aim was thus to understand organisational members’ taken-for-granted assumptions and rules (Charmaz & Olesen, 1997) and to emphasise a process rather than a description of a setting (Charmaz, 2006). Because I could see data everywhere and nowhere while practising such data collection, and also as the allotted time for these observation sessions was very short, it was important for me to closely choose and structure what I should observe regarding my research question and what I needed to advance my theorisation (Justesen & Mik-Meyer, 2012). To observe the actors in their natural settings, I opted for a participant-as-observer stance (Gold, 1969). Through that role and to legitimate it, I had to tell “everybody openly about both [my] project and the purpose of [my] presence” so I could maintain a distance from the practice (*ibid*, 2012: 101). Here, because my interpretations were the actual study tools (Esterberg, 2002), I had to review my observations with an actor of the project to whom I had access. For instance, I was

invited as a guest to the committee that would choose the architect agency to renovate the Schlumberger Lecture Hall, and I had the opportunity to follow six construction works meetings with the main stakeholders in the Vendôme Hotel renovation. After each observation, I discussed what appeared to me as essential with the project manager, so I could constitute a respondent validation (Kvale, 1996). I implemented the same practice while following two construction works' meetings for the French Pantheon restoration. The main reason I wanted to attend such meetings was because these buildings works were not finished at the time and I thought it would be useful to get a big picture of the stakeholder discussions in real time.

Following those observations and to contextualise and support the analysis, I wrote field notes (Emerson, Fretz & Shaw, 1995). At the end of the data collection, I wrote 39 pages of notes, which were equivalent to 9 observations. Although these notes were mostly brief, they were later transformed into descriptive, analytic and reflexive notes (Eriksson & Kovalainen, 2008). Following the chosen structure and my topic of study, the notes focused on some of the following questions (Charmaz & Mitchell, 2001):

- how are actors organised?
- how are members stratified and who is in charge?
- what do actors pay attention to and what is important or critical?
- what symbols do actors invoke to understand what they encounter?
- what practices do actors employ?
- what goals do they seek?

The interest was to observe how actors interact with each other, how the context affects those interactions and to highlight the "different actors' position, social identities and strategies" (Järvinen & Mik-Meyer, 2005: 118).

2. Data analysis

To discover and analyse how the organisation and the architects intertwined the "old" and the "new" while integrating new elements into a listed building, and how an institution can be conveyed while its instantiation is modified, I used the Grounded-

Theory Methodology coding tool to analyse the data I collected. Coding is the “process of defining what the data are about” (Charmaz, 2006: 43), which helped me to separate and sort the data to begin the analysis. Through this analysis, my aim was to develop an original but substantive theory, as it would be situated in a specific context and dependent on actors’ actions and interactions between themselves and with me (Charmaz, 2007). While creating and naming the code myself, *i.e. open coding*, the purpose was to interpret the tacit meanings of actors. Because of the reasonable amount of interviews conducted, I chose to code without the help of software such as NVivo. The other reason was I really wanted to understand and get to know the data in depth and to practice a sharp analysis to shape and play with what I discovered so as to build a coherent and articulated outcome. The coded data come from interviews, personal notes, documents, and archives but also from pictures or architects’ schemes – where possible.

I entered the field with my mind as theory-free as possible, but I mobilised “sensitizing concepts” (Blumer, 1969) – mainly bricolage – in order to help me to dig the core features of this notion through the chosen field. Nevertheless, I did not implement “bricolage” preconceived codes. To remain open to all theoretical directions given by my data and in vivo terms, I started by conducting an *initial coding*, and specifically a *line-by-line coding*. This type of coding encouraged me to meticulously emphasise details while quickly moving through the data. I applied the gerund form as much as possible to reflect actions and detect processes. I also used a constant comparative method (Glaser & Strauss, 1967) to find similarities and differences and to determine which data I should collect next. For instance, here are some of the codes I named: “respecting a fixed budget”, “relying on LBI values” or “rethinking the existing to integrate new ideas”. It was during this first step that I realised that sustainable or green elements were just a part of what actors considered as “new”.

After this first step of open coding, I used *axial focused coding* to synthesise previous codes and obtain themes in order to give coherence to the emerging analysis (Strauss, 1987). This was in order to start conceptualising the data and linking them. By doing so, I developed an analytical framework that enabled me to target the specific (missing) data I needed and to shape my research question. It was at this stage that I abandoned the

literature on institutional maintenance work as I realised through my data that the actors were focused more on the building itself and its transformation than on their institutional impacts. Themes that emerged were: “normative tool”, “individual preference” or “enactment of Heritage”.

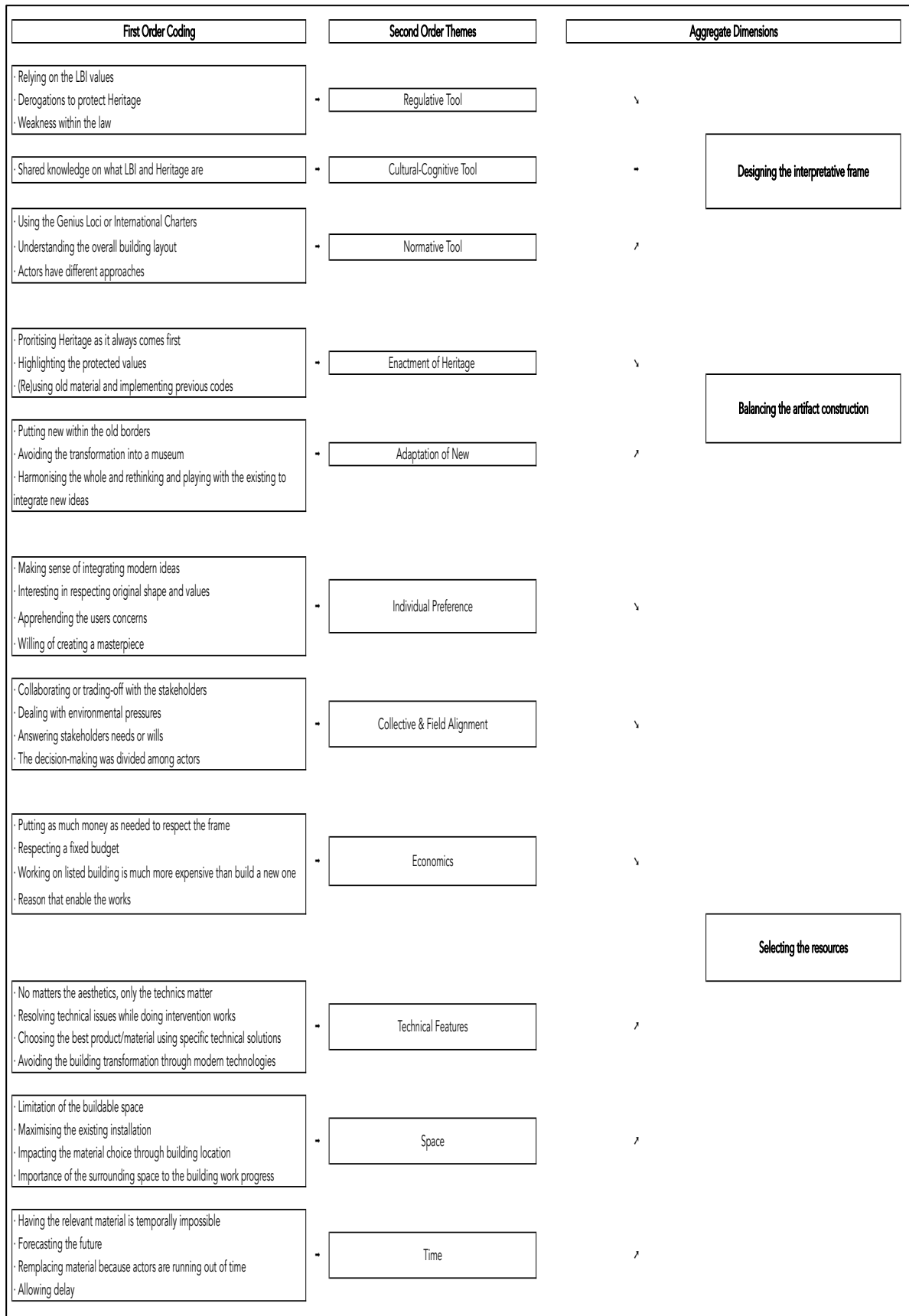
A last step was to develop aggregate dimensions and link them to each other through *theoretical coding* (Glaser, 2005). The task here was to reach another level of objectivation and conceptualisation while associating and integrating together all the themes previously found.

In regards to Glaser’s theoretical coding families (1978), especially the *process* and the *interactive* – because my three items fit together to produce a unique outcome – I approached such a coding in an emergent process way (Charmaz, 2014) as the prior knowledge I used was relying on the second order themes I emphasised and not on existing theoretical codes *per se*. Consequently, at the end of my coding phase, I highlighted three final codes “designing the interpretative frame”, “balancing the artifact construction” and “selecting the resources” which link and make dynamic the main concepts of my thesis – the actor, the artifact and the institutional frame – in order to explain the instantiation construction process. My data structure is represented below in Figure 3, which I used to base and develop my substantive theory – in my case, a process model.

All along the process, I practised iteration between data and academic literature and I recoded my data at least twice. The first time was after I had to re-evaluate what I should qualify as “new” – because sustainable development elements were not enough important to qualify and consider all the possible contemporary adjustments. The second time was after I changed my theoretical focus from Institutional Work to Scandinavian Institutionalism.

In terms of theoretical saturation, beyond the approval of my peers – and my supervisor – , I stated that I reached it when the stories and explanations provided by my interviewees were recurrent, highlighted the same issues and did not bring any elements to my intellectual reflection and my on-going theorisation (Charmaz, 2014).

Figure 3. The data structure



By taking into account the situation of research and the reach of theoretical saturation, I also decided to call it a day in February 2015 when I left on my Boston College visiting, which lasted until April 30th 2015, as I was running out of time to pursue data collection (Wiener, 2007).

Moreover, memo writing helped advance my analytical progression by a constant comparison between the different cases of the listed buildings (Dumez, 2013). Throughout the Ph.D., I also tried to practice a clustering prewriting technique to both liberate and organise my ideas (Rico, 1983) while hoping this would help me to easily apprehend the task of writing in English, which it is not my native language.

The data collection and analysis nonetheless have some limitations. The first one, which pertains to data collection, is related to the difficulty in contacting certain actors who never answered my interview requests: for instance, both the headmasters of the Sølvgade and the Munkegård schools and some Heritage State architects in France. The reasons for this were numerous: in Denmark, the headmaster in one school was replaced and therefore absent; in France the difficult professional context facing these architects can be overwhelming and also encourage them to avoid publicity.

The second limitation, an analysis one, is associated with the fact that some sources were not fully exploited because of linguistic barriers; e.g. some Danish documents were not used as Ministry of Defence's archives because of the time-consuming operation. Misunderstandings may also be present in the current document because of approximate translations between Danish, English and French.

PART 3 – FINDINGS & ANALYSIS

After an outline of what is next and an *Avant-propos* who details the building works' steps and involved actors, Part 3 presents the dissertation results and their associated discussions; each following chapter consists of one "results" and one "discussion" sections. With the idea in mind to understand the instantiation construction process, Chapter 6 explains the symbolic construction, while Chapter 7 focuses on the material construction of it.

Outline of Part 3

After having introduced to the reader the different steps and the main actors involved in a process of listed building's construction works via a preliminary part – the Avant-Propos –, the current part will be divided in two chapters in order to enhance a better understanding of how actors modify the instantiation of an established institution through collective bricolage. Both Chapter 6 and Chapter 7 include a “findings” and a “discussion” sections.

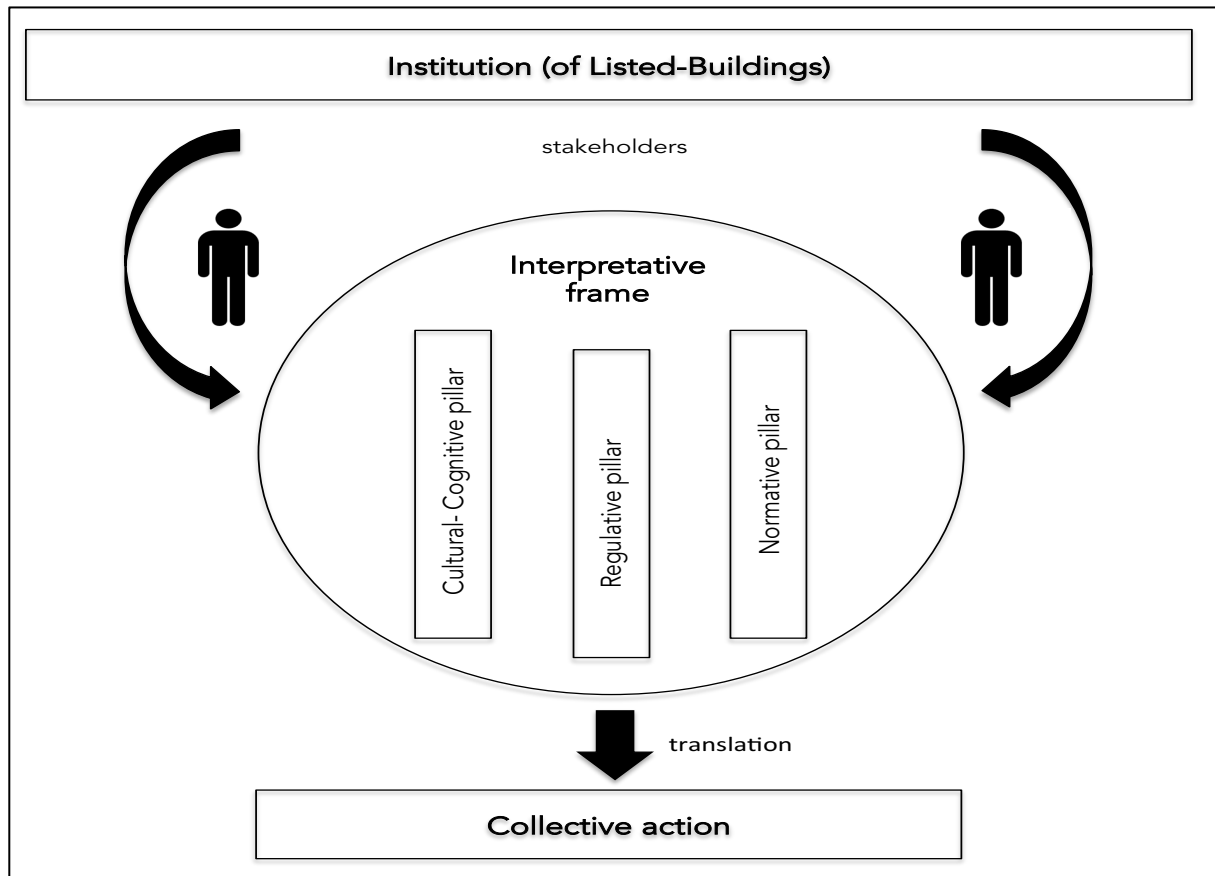
The Chapter 6 is focused on the *interpretative frame* that symbolically links the institution and its instantiation. More specifically, I explore what constitutes such frame and what its role is regarding the interrelations that exist between an institution, its artifact carrier and the actors who work on it. Indeed, if the Scandinavian Institutionalism literature already explains how actors can translate into practice an intangible idea, the question of the components of such an institutional frame remains overlooked. That is why the dissertation contributes to the neo-institutional literature by arguing that such frame is built by means of the three institutional pillars, which are the components actors play with to know to what extent they can unfold action (cf. Figure 4).

Throughout the study, I analyse the practice implemented by a collective of actors who have to tangibly modify an artifact, here a listed building, while keeping its instantiational character coming from the Listed-Buildings Institution. Consequently, to enable such one and only shared material practice, the thesis underlines the importance of such an interpretative frame so the actors can share and intertwine their interpretations of the building's authenticity, *i.e.* the main leitmotiv on which institution of Listed-Buildings relies and takes its legitimacy from, in order to work towards the same goal. The aim for actors is thus to use the interpretative frame as a way to collectively interpret one specific but essential institutional feature in order to collectively do a practice that fits with it.

De facto, I argue in Chapter 6 that this *a posteriori* construction of the interpretative frame facilitates collective decision-making, as it acts as a shared and stabilised knowledge resource among actors. And by extension, I demonstrate and picture how the

translation of the interpretative frame into an artifact reinforces the legitimacy of the institution and its taken-for-grantedness.

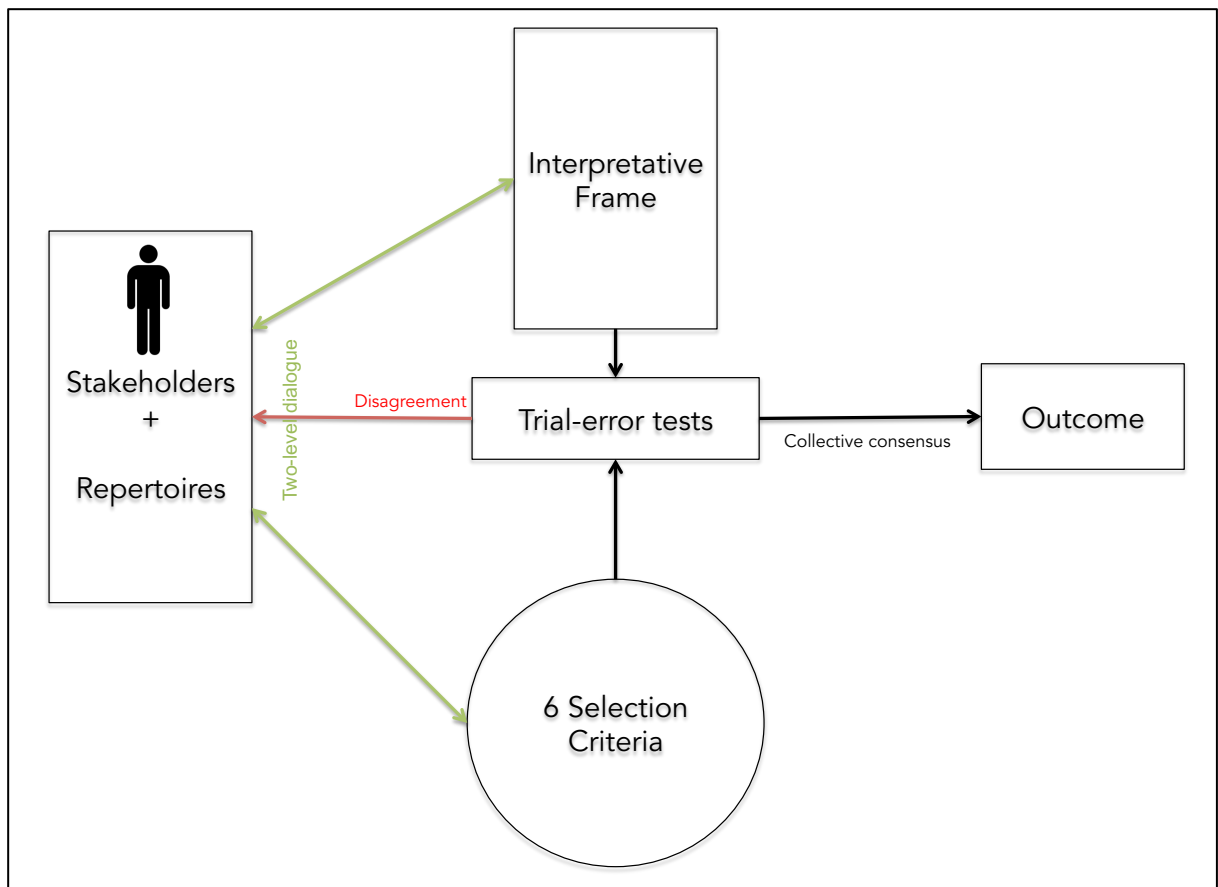
Figure 4. From the institution interpretation to the collective action



Chapter 7 focuses on *collective bricolage* and more precisely on the *two-level dialogue* implemented to collectively select the resources that will be intertwined to produce the unique outcome that keeps conveying the institution. To do so, I extend the current literature on bricolage by adding some understanding on the concept of dialogue in case of a collective selection of resources at hand, which remains overlooked by scholars. Indeed, I divide the dialogue into a two-level dimension while arguing that actors need at the same time to dialogue both with their shared interpretative frame to balance the outcome through trial-error tests and with the overall resources at hand they select and mix by means of six selection criteria: the individual preference, the collective and field alignment, the economics, the technical features, the time and the space (cf. Figure 5).

The *first-level* dimension I am interested in highlights the different materialisations suggested by the stakeholders to balance the “old” and the “new”, i.e. the respect of embodied Heritage of a listed building while integrated new materials or requirements, such as sustainable development demands, because both survival and legitimacy on such a building regarding its function depend on its modernisation. More specifically, I detail how they practice trial-error tests and make compromises by submitting the outcome to the shared resource they designed – the interpretative frame – to position and enhance its instantiational character. Indeed, an artifact without the integration of the symbolic construction remains a mundane artifact. This is the reason why I argue that such interpretative frame translation into material practices leads to the strengthening of the artifact’s legitimacy as the institution’s instantiation despite its tangible, and sometimes innovative transformation.

Figure 5. The two-level dialogue of collective bricolage

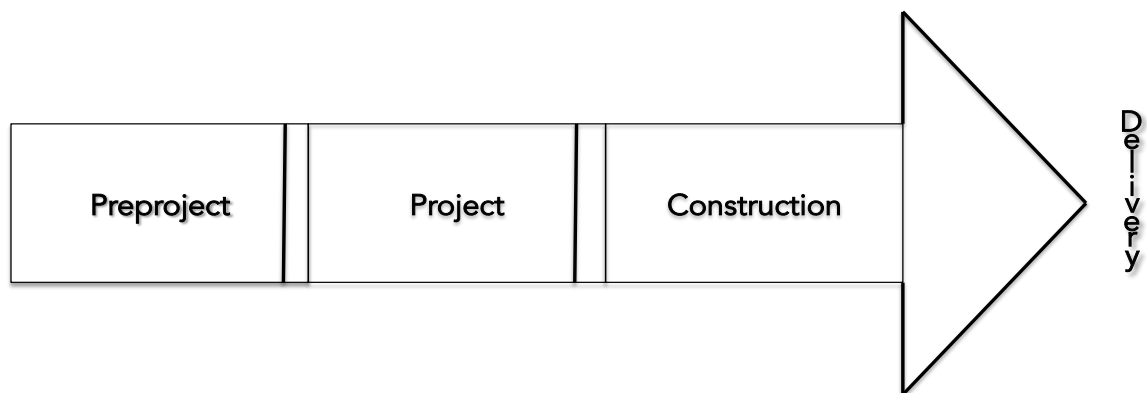


For the **second-level** dimension, I extend the detailed analysis of the mechanism of trial-error tests by focusing on how a final decision regarding the chosen outcome is made, *i.e.* how actors collectively select the relevant materials resources to (re)construct such an instantiation approved by all. After having noticed that such decision-making process remains blurred as the decision is divided between all the stakeholders, I discover and underline the importance of six criteria to organise the decisional anarchy among actors through consensuses on which resources at hand they have to select from each actors' repertoires and use. *De facto*, the dissertation provides another illustration on the fact that collective bricolage is not an improvised process but a structured activity as there exist multiple iterations among actors following different criteria that disconnects into two different steps the outcome's conception and production (*cf.* Figure 5).

Avant-propos: The building work's steps and actors

The main purpose of the six construction works was to modernise the listed buildings while respecting the Listed-Buildings Institution (LBI) and responding to all specific requests of the stakeholders. The overall building works process for an intervention work, *i.e.* either a restoration or renovation, was divided into three different steps before the final building delivery: the pre-project, the project and the construction (Figure 6). Within that process, actors were numerous. There were a client, State or private architects, patron/sponsor, etc. Without presenting them all at once, I will introduce the ones the study focuses on as they appeared in the building works' process I describe.

Figure 6. The three steps of listed building's construction works



1. Initiating the works: the preproject

1.1. *The client and the desire of works*

All the building works started with the initiative of clients who wanted to modernise a building, whose they manage the exploitation and the operations – in the

present study, all listed buildings were mainly owned by the State or the city where the building was located. The reasons that motivated such works could be various: e.g., either the building needed to be restored because it was falling apart or the client wanted to diffuse the values of the building for different purposes.

The first step the client had to implement was the creation of a prior study and a contextual analysis. This phase was fully under the responsibility of the building operator who possibly appointed one site or project manager. Indeed, in such a process, either the building operator or a project manager represented the client.

Within these preliminary studies, the client decided what building work to launch and question its definition, its content, its localisation and the method of financing – if the funding did not belong to her/him and other sources were considered. Then, this actor elaborated a first building specification explaining in detail its design, its function, the new needs required and also what Heritage aspects the chosen architects should respect. As the École des Mines' project manager explained to me:

"So the process ... generally there is what is called the preliminary studies, which consist to forecast what can be done and what are the constraints that could completely make a construction impossible ... a certain number of things such as the feasibility ... well a certain number of studies. [...] Then there is the building specification. So, with the building design, things are becoming more serious as the major elements, which are going to be given to the architects, are defined. This is decisive because if guidelines are given to them ... well they are going to work according to our needs. The architects will work according to this ... and this is the most important [...] Also, a part of the specification highlights on what you can act, what you have to keep but it is the architects' proposal that offer what to do, modify, etc."

The building specification could take several forms from a basic checklist transformed by the project manager into a building assessment to a national report. At Nyboder or at the École des Mines, a competition proposal clarified all the expectations of the building works. For the French Pantheon, French Republic President François Hollande requested

Mr Bélaval, the director of the Centre des Monuments Nationaux (CMN)²⁶ which is the public administration that manages the building, to write a report that highlighted the strengths and the weakness of the building in terms of how French citizens perceived it and what to do in order to enhance its patriotic message (Bélaval, 2013).

After the building specification's definition, the client publicly communicated on the project through various tools such as official announcements or building magazines and most of the time asked for competition between architecture firms by means of a call for bids.

1.2. *The competition (or not) and the selection committee*

Calls for bids were the common way to designate an architect firm as general contractor²⁷. Once the competition was launched, the client spent time to discuss on what to expect from the architecture firm and to list key elements they will take into account, according to the building specification, in order to choose a candidate instead of another. Some of those were associated directly with the applicants' characteristics – e.g. "how flexible or innovative are the architects?" or "are they able to run such a listed building project?" – or to the project itself, i.e. to what extent they respect the building specification and what about its technical aspects, its aesthetics, its budget, etc.? Such discussions or meetings were necessary to share a same vision among all the actors that represented the client to be sure they were on the same page – indeed, with the project manager or the building operator, other actors, such as the head of the building, the employees or some current users also participated in these discussions.

However, call for bids were not invariable as two of my studied cases bypassed it while in the four others they were compulsory. In the Munkegård Skole, the client selected a new

²⁶ The CMN is a French public administration that manages the national monuments that belong to the French State. Except the Pantheon, its most famous buildings are the Mont-Saint-Michel, the Parisian Arc de Triomphe or the Carcassonne Castle (cf. <http://www.monuments-nationaux.fr/en/le-centre-des-monuments-nationaux/who-are-we/>).

²⁷ For the sake of simplification and even though the client, the project manager, or later the patron, were sometimes represented by architects, I will continue to write "client" or "patron", i.e. their role within the process, in order not to create a misunderstanding with the architects of the chosen firm which were the prime contractor.

architecture firm after an original call for bids. Because the client was unhappy with the first chosen one, the Gentofte municipality looked for a new firm that was already famous in the treatment of listed buildings. In Paris, because of its national status and the fact it was classified as a listed building – which is the most prestigious type of listing –, the Pantheon had one dedicated private architecture firm for all the works it undergoes.

The selection committee was the moment when the client met for the first time the candidates and judged them and their projects they previously sent. During this committee, beyond their project they presented in front of the jury and what they wanted to implement, architects who competed most of the time presented their own contextual analysis and highlighted the values that must be protected. The interest to prematurely establish the interesting values relied on the search of solutions or alternatives to the *"you cannot do anything when a building is listed"* problem to get the proposal accepted more easily by the client.

During a project defence, the main interest for both parties present was to comprehend how they could work together and in the same direction, even though the client agreed to say: *"the best architect is not the most obedient"* and *"a construction is often equivalent to a trial"*.

To do that, the choice of a firm instead of another depended upon the project and the actual reasons of this selection remained multiple. Indeed, the architectural qualities were essential as problems are always recurrent in such a listed building project. Then, if the technical characteristics were more important in the École des Mines than the aesthetics ones, those latter were essential in Sølvgade Skole or in Molitor swimming pool, as well as the respect of the original function. However, in each case, the client considered the treatment of Heritage values, the price and the expected time of the construction. As different project managers told me:

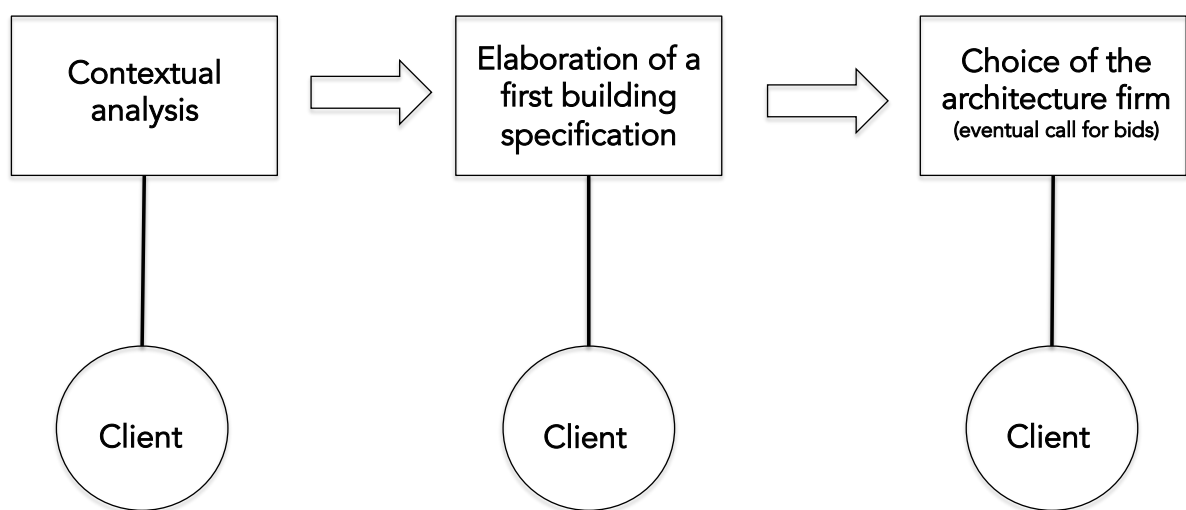
"Directly under the Ministry of Defense, there was an architectural competition where we have five firms making a proposal – drawing and description - and we estimated the cost and how long it would take".

“The city of Paris asked for a sustainable program, i.e. a program which is economically viable. [...] And the aim of our project was to preserve the pool both in its original building’s structure and more especially in its use”.

At the end, and in case of an architectural competition, the project and the respect to the building specification mattered more than the reputation of the chosen firm in terms of its skills related to listed building works, which had been already checked through a pre-selection. Nevertheless, regarding the modernisation mission, this point had to be balanced as the client dismissed all the projects that were too conservative and privileged the innovative ones. Even though, as I am going to analyse it, discussions between intertwining the “old” and the “new” through materials were skyrocketing, *“there were sometimes interest alignments where Heritage topics were encroaching on the function and where the client preached quite firmly to the simplification of the project”*. Indeed, there was no interest for a client to pastiche an old version.

As soon as the client awarded an architecture firm through a vote between its main representatives, the preproject ended and the project started – the Figure 7 summarises the first step of the process and actors who took part therein.

Figure 7. The steps of the preproject



2. The project: the client and the chosen architecture firm

After having established an architect team, both the architects and the client, i.e. at that step the project manager, started to meet each other on a regular basis to enhance their collaboration and coordinate their sometimes divergent interests but also their shared objective regarding the building works. Indeed they needed to figure out how it was possible to work on the listed building while modifying it.

The first thing they had to do was then to draw sketches and at the same time analyse the values they needed to preserve because of the listed building protection. To address these needs, they referenced in a document all the Heritage values that seemed essential for them. Simultaneously they elaborated first sketches and graphs regarding what they have highlighted. Both actions were actually done before they knew in detail what they were really going to do with the building and what would be their leeway in case of modifications – for instance in the case they had to bypass essential values. Actually, they just analysed what they could do, not what the building should be. As the architects of Nyboder well detailed:

“When you start a project, you normally have an idea of what you want to use for the building and you try to do this as earlier as possible. Then, you start to make an idea of what you want to do, makes some kind of early project. When this is done, you make a consequence analysis of the building to see if all the ideas you have here, all the values you have ... how are they affected by the suggestions you have made? And hopefully, it shows that you do not interfere with the values of the building. And then you go to the normal phases again after the early project.”

Then, the whole team created a first building proposal that served to shape the entire project but also to submit it to a Cultural Public Office (CPO)²⁸ that gave or gave not its approval to the project. As an architect from the Danish CPO told me:

“My role is ... when you have to make projects on the listed buildings, the owner, the operator, or the architect whoever, is sending the project, describe the changes they want to have and they send all these descriptions and drawings, whatever it is needed. They send it to us and we look it through. Then we decide on what it is something that we find it is acceptable ... whether there is something strange ... something strange that [they] will put in: in that case we say no and they have to try to find another solution. So my function is basically to secure that what will be done in a listed building is correct.”

Furthermore, if needed, these documents were sent to sponsors or governmental entities that may finance the building works. The role of the patron within the project was similar to the CPO role, as an architect working for a Danish foundation described it:

“Usually the process is that the client, the applicant, comes to us with the project that they have been working on for a long time. And then they are simply sending an application. When they approach a foundation they have a very professional project to present [...] we have an open-eye to projects that faces a bigger challenge and a more general topic ... we have a legacy of supporting complicated projects within the common good”.

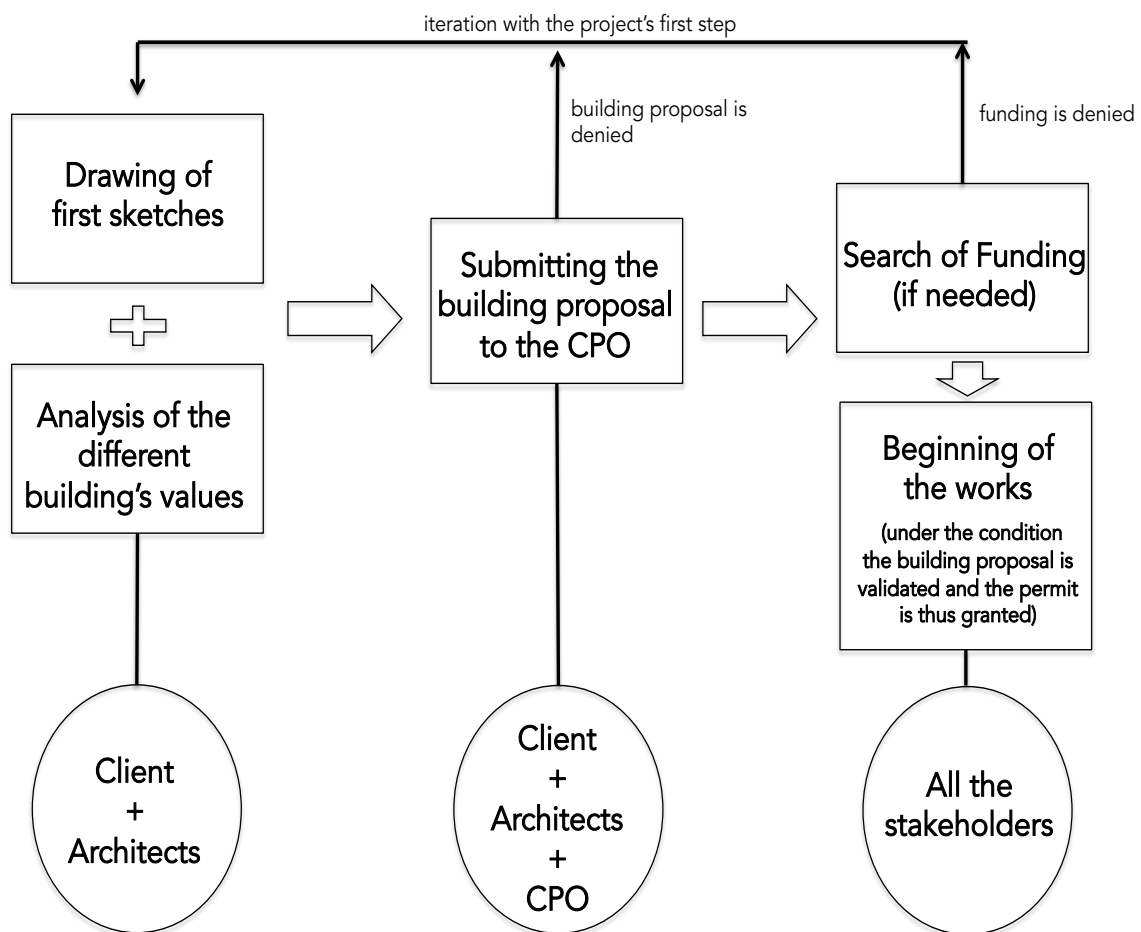
If highlighting all the building values was closed to “an academic approach”, how to deal and work with them in case of such construction works was much more a hands-on experience, because if the CPO, or the patron, did not validate the project, because they

²⁸ In Denmark, it was the Board of Cultural Heritage (BCH). In France, it was the DRAC, the Regional Office of Cultural Affairs. In both countries, they were represented by CPO or State architects.

interfered with the protected values, both the client and the architects had to redo the proposal. The main reason was the on-going, and sometimes never-ending, discussions between all the stakeholders to decide what in the building should be maintain, change, etc.; the major aim being thus to collectively agree on the future building features to get the building permit and launch the construction phase.

The determination of the values the building works should respect thus remained one of the basic but major compulsory steps, so the main project could begin. As the reasons why a building was listed, or why a specific element was protected instead of another and deserved or not to be rescued, were various and sometimes obscure, the actors had to design the frame protected by the LBI, named authenticity, through which they can manipulate the building.

Figure 8. The steps of the project



Performing this action was tantamount to discover the underlying Heritage the actors tried to respect with the restoration or renovation works and to know to what extent they could integrate new elements or materials next to old ones. The Figure 8 sums up the project step with the possible iterations.

3. The construction phase

Once the building permit was issued, different procedures and tasks had to be completed before the construction could start²⁹. Without being too exhaustive, there were:

- various building studies such as the acoustic, structural, hygiene and security standards analyses, etc.,
- the choice of construction companies that handled the works through market and competitive calls,
- the conformity of the project regarding the legislation or some issues like the sustainable development,
- insurance underwriting,
- timeline scheduling, etc.

However, the beginning of the works did not mean the end of the stakeholders' discussions. One of the main reasons actors were still able to discuss which materials they were going to use depended upon the way they fulfilled the permit. Indeed, by providing only the necessary details such as the overall size and aspects by means of the drawings, actors gave to themselves the leeway to change materials if needed and to rebound back CPO's representatives monitoring in case they asked to change building elements because of Heritage disturbance. Nevertheless, actors had to respect the proposal, as it was filed and validated. All along the building works, and even after the delivery, the CPO but also patrons – if they did not belong to the client's members –

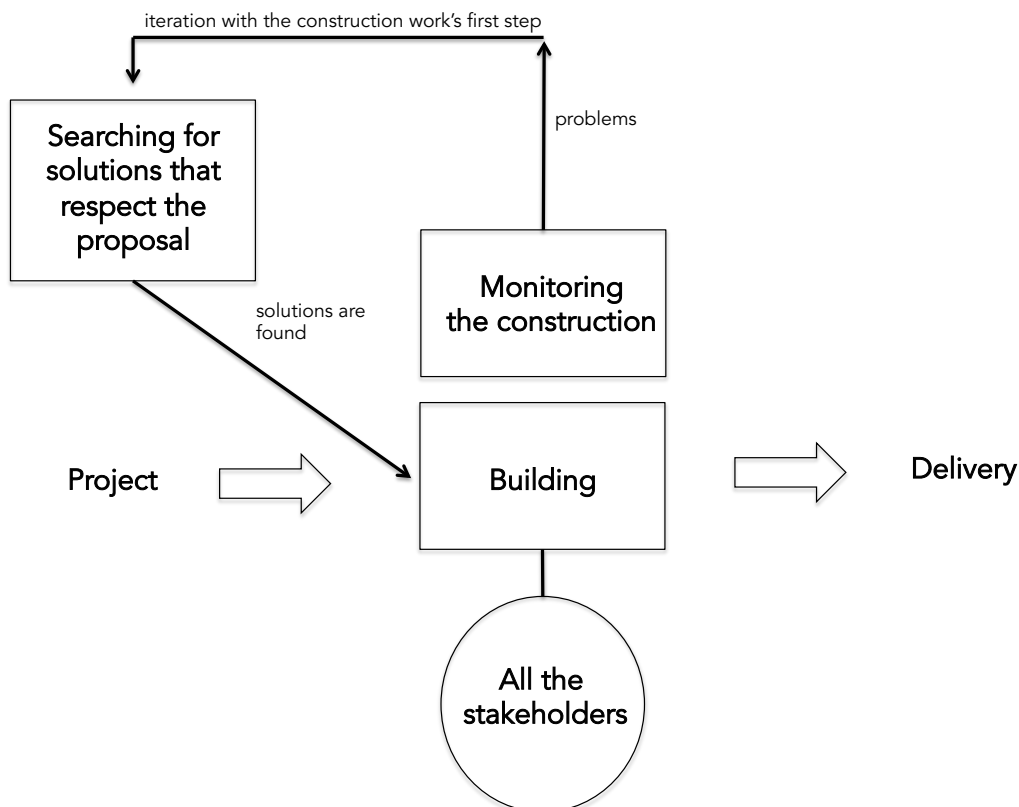
²⁹ I have to precise here that most of these procedures, such as the choice of the construction companies or their role in the process, are not included in the study. Along that vein, the consequences of the various analyses are taking into account only when they had interfered with the discussion process – between the main stakeholders – on which materials they should used.

operated quality controls in order to check if both architects and client respected what they have been told to modify and what they have been paid for. The CPO and patron could always express their opinion if they did not agree with what the building was underdoing. Besides, consequences might be severe. As a French CPO architect and a patron confirmed it to me:

"It is important that they feel we [CPO architects] provide direction but if they start to fool around, we will go to court!"

"If one of the representatives the foundation has commissioned realises that the client cannot meet the quality ... well he/she cannot meet the quality we all agreed on: actually we do not reverse to him/her any money! We will not even wonder and try to understand why!"

Figure 9. The steps of the construction



Both the client and architects could also check if everything on the construction went well through site meetings which also well pictured this phenomenon of on-going discussions as such events were the place to talk about and end *“to each his own”* divergent approaches regarding the works. Those encounters also enhanced informal talks that led to conflicts resolutions between actors whose works and progresses depended from others. The project manager interacted with the prime contractor, *i.e.* the chosen architecture firm, whose role was to organise the proceedings of the works between the different construction professions in attendance following directions given by the CPO and/or the patron. The aim of such discussions during the construction step was to draw attention of all the actors on problems and find solutions to make the delivery happened *“as it always does”* as one building company employee told me (*cf.* Figure 9).

Chapter 6: Designing the interpretative frame “building’s authenticity”: the symbolic construction of the instantiation

1. The question of the building’s authenticity

The main purpose of construction works was to modernise a building while respecting the Listed-Buildings Institution (LBI) and thus its instantiational character, as it had to carry its core features to enhance its legitimacy, even after the works were completed. Such modernisation works are called *contemporary adjustments*, and in most cases in order for the buildings concerned to keep being used and survive, the original building layout had to be modified, which required relevant materials to be selected for that purpose. Such a choice was indeed essential because if the updated version of the building did not fit with the LBI’s institutional frame, even despite – especially despite – its modernisation, it would not be listed anymore and it would become another ordinary building. This question of material selection therefore led to a lot of discussions between actors, especially when the client and the chosen architecture firm started working together as soon as the project’s step was launched – the current study begins at that point (cf. the project first step: Figure 8). These discussions on the choice of materials proved to be the biggest challenge in achieving the dual aim of rescuing the embodied Heritage of the building and transforming it into a modern installation while keeping the function it was built with or protected for. As one interviewer summed this up during an exchange with an architecture firm:

“It sounds a lot like it is in the choice of materials!”

To initiate the selection of materials, the first step was to identify and elaborate the values the building works should respect. Such values were integrated under the concept

of authenticity that “appears as the essential qualifying factor concerning values [because] the understanding of authenticity plays a fundamental role in all scientific studies of cultural Heritage, in conservation and restoration planning” (Article 10 of the Nara Document on Authenticity, 1994). The authenticity the actors needed or wanted to highlight constituted what the LBI has the mission to protect and spread. Because the reasons why a building is listed are often unclear or absent, revealing the building’s authenticity provided the actors with some leeway on what they could implement or not in the listed building they worked on. Indeed, this delimited the scope of action so actors could know which part of Heritage they had to enhance and to what extent they could add, modify or delete some material elements. Indeed, the authenticity became visible and tangible through materials. As one project manager argued:

“... the way the authenticity is expressed is about the choice of materials rather than the width of a corridor ...”

However, as the concept was introduced to the field of listed building’s construction works without a clear definition (Stovel, 1994) and while it became the postulate that actors needed to respect so they could socially validate their interventions, the questions of what authenticity meant for them, and how they could apprehend and conceptualise such an intangible concept, must be clarified.

1.1. An overall definition of authenticity

Etymologically, “authenticity” derives from the Ancient Greek *authentikòs* and from the Latin *authenticus*. Its initial definition designates what makes or who owns the authority. However, there are as many definitions of *authenticity* as there are cultures. Its meaning continues to evolve mainly since the 18th century (Taylor, 1991), when intellectuals, such as Goethe or Hegel who focused on the relationship between an individual and society, stated “that is called authentic, which is sufficient to itself, which commends, sustains, proves itself, and hath credit and authority from itself” (Jokilehto,

1994: 19). Nowadays, even though “authenticity” has become a societal keyword, its meaning is still highly contested (Amrein, 2009). Following the Oxford English Dictionary (2015), the term “authenticity” has various meanings that emphasise the qualities:

- of being true or in accordance with fact,
- of being authoritative or duly authorised,
- of being genuine,
- of truthful correspondence between inner feelings and their outward expression,
- of accurately reflecting a model or exemplar, and
- of being real.

Ito suggested that authenticity must be the synthesis of the words “authority”, “reliability” and “genuineness” and noted how relevant it is to implement such a combination regarding the fact that such authenticity depends upon a formal institution that officially promotes the authentic character of an artifact while protecting it and thus forces its taken-for-grantedness to the common people “who have no option but to rely on the judgement” (1994: 36). Being authentic is not a value *per se*, but more a condition based on the understandings of the specific qualities of an artifact in a specific context. In that sense, authenticity cannot be given and can only be revealed.

1.2. *The authenticity in listed building’ construction works*

Historically, within the LBI, the notion of “authenticity” has evolved a lot since the 19th century, ranging from the material “age value” to the “function as essence” of a building (Olin, 1992). Today, the latter has stabilised around Cesare Brandi’s philosophy. By stretching Heidegger’s inseparable relationship between form and material in a work of art to describe its essence (1935), Brandi argued that the recognition of such a characteristic is based on the identification of its physical consistency and its dual aesthetic and historical dimensions. According to him, an artifact “has potential unity, which forms its existing reality and defines it materially” (Brandi, 1963 quoted in Jokilehto, 1994: 27). What is interesting here is that such recognition is made when

actors carry out an intervention work. Yet this recognition acts as the condition *sine qua non* that enables the intervention on a listed building – whose aim is *de facto* to re-establish this potential unity. Indeed, as the artifact itself conditions the intervention, the authenticity is the result of the critical process of an intervention which relies on a methodology used to both discover and highlight the values that constitute the object and that should be respected.

Moreover, because a building may have experienced many interventions during its lifetime, authenticity has to integrate the overall building's historical continuity and can no longer be related to the original creative source. Such evolving authenticity is due to the *opera aperta* character of an artifact, *i.e.* the way the artwork is opened, as it is the result of both the artist's creative process and the meaning construction developed by people representing social characteristics and requirements at a specific time (Eco, 1962). An anecdote, given by one architect interviewed, provides a good picture of authenticity as a social symbolic construction:

"This is extraordinary mental gymnastics as only Umberto Eco can do. If you want I can give you an example that reflects this notion of authenticity. My stepmother once bought at one flea market a wooden panel with a Holy Mary on it. And she said to me "what do you think?" I answered, "Well it is obviously a painting from the 15th century. It is very interesting." I looked for it in several iconographies and I found the same table attributed to a painter, etc. I had some friends who were curators at the Louvre and I asked them to appraise it. So I made an appointment with the Louvre's chief curator. We packed the table very very carefully, etc. She put it on the table of the laboratory, everyone was in a white coat with magnifying glasses: there was all this ceremony! She looked at it for twenty minutes and then she said, "No, it is a fake." So we packed it up with big string around it, and we left with it under our arm ... The look was not the same! ... But I am not sure that she was right by the way, I think it was a genuine table ... I think she was wrong but no matter ... It is like the banknote. When you have a banknote in your hand and you are told "it is a genuine one", it is

respectable. If it is counterfeit, you tear it apart! Well this is authenticity: it is very abstract and very subjective."

Without being drastic, this attribute of authenticity in the LBI is summed up as the "here and now" of a building for it establishes its unique existence. According to Benjamin (1935/1979), a building's authenticity – he called it its "aura" – is simultaneously very close and very distant as the original work is still recognisable under its present form, as are its essential values (Penna & Cunha, 1994). However the difficulty identifying the current aura subsists, as the past interventions generally disrupt or improve the original symbolic meaning while materialising its modified values. Deciding whether or not to accept these new features during a new intervention is thus an authenticity test, whereby only those who work on the building can acknowledge and judge – or not – if it could be maintained for the contemporary societal context and become a reference for future interventions. Viollet-le-Duc's restorations and the on-going debates about his interventions are the best examples to illustrate this point.

Eugène Emmanuel Viollet-le-Duc (1814-1879) is the most famous and controversial architect regarding building restorations³⁰. Even though Viollet-le-Duc did not concentrate his works on the question of authenticity *per se* (Choay, 2009), his writings on restoration set the standard for the "Violletleducian" approach based on the following leitmotiv: "Restoration. Both the word and the thing are modern. To restore an edifice means neither to maintain it, nor to repair it, nor to rebuild it; it means to re-establish it in a finished state, which may in fact never have actually existed at any given time" (Viollet-le-Duc, 1854-1868, Volume 8: 14). Following that postulate, Viollet-le-Duc carried out a lot of building works that continue to generate arguments between LBI actors. The "long-running" question advanced is whether building interventions should consider Viollet-le-Duc restorations or not? Put differently, are the modifications made by Viollet-le-Duc part of the building's authenticity? The absence of consensus has led to antagonistic treatments of his works.

³⁰ This is the reason why I approached the field by reading his major books – mainly his *Entretiens sur l'Architecture* (1863-1872) – and why his name was repeatedly mentioned throughout the data collection (around 30 times in 24 interviews).

On one side, Viollet-le-Duc’s interventions underwent de-restorations – e.g. the Toulouse Saint-Sernin in the late 1980s –, including the gradual removals of some of his liturgical installations, and there have been fierce debates about almost irreversible modifications especially at Notre-Dame-de-Paris, whose south Rose Window he radically transformed in comparison to the original (Leniaud, 2014). However, even though this transformation is “just completely unthinkable in terms of authenticity” as one member of a Protection Society asserted, this particular intervention is totally unknown to most common people, who consider the present Rose to be the authentic one. As a former ICOMOS member told me to illustrate this idea:

“I am from Avignon. I always saw the Papal Palace with the two towers that were added by Viollet-le-Duc. I remembered how upset I was when I suddenly realised that these things had not been there for ages! When I saw the first postcards with the Papal Palace as it was before Viollet-le-Duc, I thought “but that is not the Papal Palace, how is this possible? ... For me, the true look of the building was Viollet-le-Duc’s.”

On the contrary, some of these interventions were thus completely integrated into the current aura of the building. The strongest example is the Fortified City of Carcassonne in France. Listed in 1997 under the UNESCO International Heritage protection regime³¹, Viollet-le-Duc’s modifications were included despite their polemical legitimacy (*ibid*, 2014). Actually, it is his vision to highlight, via the culture and practices of his time, the structural system and intangible rules that were hidden – or materials elements that were previously impossible to build – within the building that is recognised today (Amsellem, 2014). To some extent, the 1985 UNESCO protection of the Vieux-Québec falls under the same question. Indeed, although it is the French character of the quarter that has been protected, the French people built the Place-Royale and the neighbourhood *à la française* by destroying previous British buildings (cf. Choay, 1994).

³¹ For more information: cf. <http://whc.unesco.org/en/list/345/>

1.3. *The challenge of defining authenticity*

Because the action of protection is legitimate when it helps to protect and diffuse the chosen and selected values of a building, “authenticity” represents the main principle LBI actors have to respect in case of interventions.

However such a principle cannot be defined *per se* (Fejérdy, 1994), and the decision on what can and cannot be considered as authentic is incumbent upon the same LBI embedded actors who work on listed buildings. What is certain is that the existing Heritage should be respected while taking care of the major contemporary issues (Jokilehto, 1994): “*making authentic, it is not a reason to make people live like they did 40 years ago*”. It is the reason why this principle should be understood from an “honest” perspective, *i.e.* more flexible regarding the integration of new materials as long as they enhance the understanding of the same Heritage message in order to enable its transmission (Ito, 1994).

De facto, such a transfer from one generation to one another has to overtake the form vs. material debate. If such a symbolic move is mainly possible through faithful use of materials, as they remain the best way to embody Heritage values while in themselves justifying protected elements (Inaba, 1994) – for instance associated cultural or historical practices –, paradoxically, newly-reproducing the same building in full does not prove its authenticity at all – at least not in the Western Countries, as the Japan deals with this phenomenon (Ito, 1994). The main challenge facing actors is thus to evaluate intangibly a building’s authenticity by designing a relevant symbolic frame that can be translated to both existing and new materials or elements.

Resolving this issue can be done only on a case-by-case basis. In the field, LBI actors need to design their own perception of building’s Heritage to reveal what underlying values really matter so they know to what extent they can tangibly intervene on a building and judge how far their foretold transformations can interfere with the existing and elaborated values. Since their aim is the maintenance of the building under the LBI’s protection while finding solutions or alternatives to the problem of “*you cannot do anything when a building is listed*”, they might choose to respect, perpetuate, and maybe improve, the continuity of such a monument’s symbolic properties. This is what

the architecture firm and the client had to do while submitting their vision to the CPO’s one, which officially approved (or not) their vision of authenticity and their building proposal – as the CPO’s mission is to protect such a frame. This designed and shared frame thereby acts as a collective resource that provides LBI actors with guidance for future discussions about the modernisation question and the materials selection. This is the reason why I refer to interpretative frame.

2. The interpretative frame

In the field, the stakeholders – the chosen architecture firm and the client, under the supervision of the CPO (and sometimes with the participation of the sponsor) – designed this interpretative frame using elements taken directly from the Listed-Buildings Institution, which they used as tools. Beyond the common and accepted socio-cultural knowledge of “Heritage” and of what a listed building are, the actors evaluated the values of a chosen listed building based on a normative tool that reflected a regulative one. Both the norms and regulations associated with the LBI were not only complementary but also taken-for-granted.

2.1. *The cultural-cognitive tool*

Within the field, there was no discussion at all between actors around what the concept of Heritage meant, as it governed the LBI inside which they manoeuvred. Indeed this culturally accepted notion, which “*always comes first*”, played the leading role in many ways as it was a compulsory prerequisite to frame the authenticity of the building whose protection had to be maintained. In both countries, there was no need to implicitly express and define why some buildings deserved to be protected. *De facto*, the evaluation of the main Heritage value that justified the listing and that needed to be respected during listed building interventions seemed relatively easy for the actors.

The main reason for this was that the actors themselves created their own Heritage assessment according to both the builders’ intentions and the interpretations of common

people (Fabre, 2000a). Based “more on its enjoyment than its possession” (Babelon & Chastel, 1994:109), such assessment relied on three perspectives that were sometimes intertwined (Heinich, 2009).

The first one was historical. It emphasised the need to avoid the destruction of artifacts highlighting the old times due to human stupidity – e.g. vandalism, avidity, etc. (Brichet, 1952) – and to enjoy the “beauty of death” (De Certeau, 1993), i.e. to what extent one could like, celebrate and protect what is no longer? For instance, Arne Jacobsen’s works, like the Munkegård Skole, were considered as national Heritage because “*he is a high inspiration*” for both Danish architects and designers.

Second, there was a social stance. While this was also a form of protection against the destruction, this time it was because of human progress, and specifically urban fabric. There was a resistance movement against the ephemeral logic of the contemporary consumerist period (Guillaume, 1980), and a need to accept that “*we are only passing-by ... the Heritage, we preserve it to pass it on to future generations*”, as the head of a Protection Society told me. In Sølvgade Skole, the wish of the architects was to add large windows – overlooking the courtyard – into the building extension to provide those who look through them with a “*soft link*” between the new building and the original one – which could not be destroyed as it would always be the first primary school building in Denmark.

Finally, an anthropological approach shaped the understanding of Heritage as it highlighted things that society as a whole needed to define itself (Godelier, 2007). This perspective on its own justified the protection of the French Pantheon as it was considered as the temple of the French Republic where its “Grands Hommes”, who promoted French Republic’s values and identity, were buried. In a similar vein, such a phenomenon encouraged the current generations to perpetuate old things for themselves and afterwards for their heirs through less relevant things than national identity but which still meant something for common people. In Nyboder, for instance, even if the original wall colour was white, actors decided to repaint it in yellow during their intervention because that specific colour is the reason why the neighbourhood became so popular, inspiring other housing estates inside and outside of Denmark, and, as the architects confirmed it:

“because when Danish folks think of Nyboder, they think of this yellow – “Gule” – because one of the thing that makes Nyboder significant is the yellow colour [...] even though the yellow colour does not make much sense on the building.”

Moreover, the Heritage perception was mainly culturally conditioned. For instance, like religion, a cultural environment could also influence people’s notions of what should be protected. Indeed the protection of churches – even implicit – started because people were scared of the divine consequences of their potential destruction (*ibid*, 1994). In a different cultural environment, some football – soccer – stadiums are now facing patrimonial concerns, such as the *Parc Lescure/Stade Jacques-Chaban-Delmas* built in 1924 in the city of Bordeaux, France, which was granted protection under the French “20th Heritage” label in 2007.

However, regarding the different *habitus* it existed (Bourdieu, 1979), such a Heritage outlook could have side effects that thwarted the societal interest. This was the case when private owners asked for the listing of their own house just to demonstrate their high social status, which they tried to maintain and diffuse within their own social class but also extend to lower classes; such action also enabled them to anchor their own vision of what deserved to be considered as Heritage (Aguilar, 1982).

To foil this anti-collective consideration – as Diderot pointed out (1772), you could love your dressing gown but no matter how much, there was no reason other people should love it as it was completely dilapidated and meant nothing to them – the strength of the cultural-cognitive tool crystallised around the indispensable and unavoidable role of the Cultural Public Office, which was the only referee in terms of protecting listed buildings and approving interventions. Created in order to rationalise listing procedures, this State body had the recognised authority to assert what was and was not Heritage (*ibid*, 1964). Indeed, attaching such a label to a building was enough to certify its Heritage status and enabled common people to shape their own interpretation of Heritage, as everyone was entitled to be regaled by staring at a listed building even if *“some points are only recognisable by someone who is obviously a connoisseur”*. The CPO therefore acted as

the cultural reference that “both bordered and validated the intertwining of meanings that socially constructs Heritage” (Heinich, 2009: 251).

However for that connoisseur population, such Heritage certification, while it stated the universal symbols that required a compulsory building protection, was not enough to determine in details the overall building’s values, *i.e.* its authenticity³². Indeed, “*by using at the same time the listing procedure to show Heritage to people but simultaneously to protect the function of building to let them keep evolving over time*”, CPOs instituted two different ambiguous and opposing ways of intervening on patrimonial buildings. Interviewed architects, when talking about CPO architects’ mission regarding works on listed buildings, highlighted such paradoxical treatment:

“some State architects have a very extended and generous vision of what Heritage could be, i.e. some are not bothered by having a perforated aluminium sheet in the middle of a very old material, like wood or stone, because it looks good and it is not problematic [in terms of values]”

or

“the CPO yelled at me “NO IT IS LISTED” ... so I could not argue much [on the integration of new materials].”

Consequently, this dual discourse, which existed simultaneously within CPOs, led to the development of a cultural and legitimated practice based on exchanges and on the search for a compromise between LBI actors to find leeway allowing for a collective interpretation of the underlying values of the building – and by extension a relevant “old” and “new” balance. Such interpretation was therefore free-but-institutionally-limited. The interest here was to analyse and mutualise all of the actors’ beliefs in depth.

³² In another cultural context, the trivial example of Star Wars may be helpful to understand this point. While most Star Wars fans recognise the action figurines of the Saga part as a part of its legacy – or Heritage –, the goodies only have value, *i.e.* are considered as authentic, only when their original plastic box, and thus the figurine itself remain untouched (cf. Orpana, 2012 and <http://toyworth.com/browse/action/figure/Star/Wars.html>).

Indeed, even though the architect firm and the client shared an overall knowledge of the overwhelming and carrying patrimonial character of a building, this initial assumption was not enough to understand its authenticity in full.

2.2. *The regulative tool*

To do so, and to go beyond the main Heritage character of the building, the actors first of all relied on what the regulations advocated in terms of protecting the values of listed buildings.

Within the field, State regulations provided general rules that “can be applicable to authenticate tangible cultural properties” (Larsen, 1994: 363) and thus helped actors to highlight the authenticity of the building, as this was the *raison d’être* of the World Heritage Project (Brøgger, 1994). *De facto*, these rules guaranteed that the cultural property protected under such legislation was “authentic”.

By means of regulation, actors pursued their preservation-through-intervention aim while understanding the values for which buildings have been listed and which deserved their attention. In a European Union context, there was a duty to list these building’s values because: “monuments are indeed considered as historical and artistic landmarks for memory. They contain historic and collective experience of previous generations. They remind, encourage, edify, reinforce the idea of a common good, and the sense of belonging to the same community. They transmit to the current generations cultural values that may be lacking. Punctuating the stages of our History, they are milestones on the path that goes from the past to the present, and beyond results in the future” (Knoepfli & Hering-Mitgau, 1985: 4). Translated into the levels of the two member States herein, such building features that earned official protection were formalised and promulgated in the Danish Act on Listed Buildings and Preservation of Buildings and Urban Environments (DALBPBUE, 2011) and in Book VI “Historical Monuments” of the French Heritage Code (2014), Articles L621-1 to L621-22 and L621-25 to L621-29. Beyond the reminder that all intervention work was forbidden without official State approval (Art. 3-10(1) of Danish legislation and Art. L621-9 and L621-27 of the French

Code du Patrimoine), these laws showcased two plus one major values that justified the listing and needed to be taken into account in case of intervention: the historic and artistic values of the “historical monument”, i.e. a building that was not initially built for some memorial concerns or posterity (Riegl, 1903). Another value, which also had to be protected, is the environmental value.

Because they were the “irreproachable witnesses of history” (Kersaint, 1791), the first value that justified intervening on a listed building was, of course, its historical value. Indeed, such buildings enabled the construction of stories – political, moral as well as technical – and enhanced a general pedagogy of citizenship that provided common people with a living historical memory emphasising the feeling of collective pride (Choay, 2007).

Regarding this value, actors had different levels of value interpretations based both on the building’s antiquity and its social significance. Indeed, belonging to the past, which remained one of its constitutive properties (Riegl, 1903), was not enough to produce historical value, as the seniority criteria needed a relevant context or a “memorial function” to be interesting (Guillaume, 1980). For instance, such value in the Molitor swimming pool, which was nevertheless one of the oldest Parisian swimming pools, had to be respected during the building renovation because, as the building operator expressed:

“The Great History has never written Molitor: during the Second World War, there was no heroic deed ... there has never been war declarations or signed treaties ... In terms of commemorations: nothing! Yet you take the sum of Molitor memories, it is colossal. When the site was closed to the public, as soon as I opened the door, I could not step inside without someone taking advantage of the fact that I had opened the door to try to return and regain pieces of a small souvenir. So when I started really working on it, I told myself “Right before trying to rewrite its vague future, I will try to understand what happened there!” I have met, I do not know, twenty to thirty people who have helped make Molitor what it is today. And each time, there was an amazing kind of visceral attachment ... and it was very very very strong.

Molitor, it is the sum of all those small stories and this is the fundamental purpose of this place.”

Furthermore, such memorial function also depended on the interest and the typicality character given by the actors to the artifact. They evaluated to what extent the building emphasised something exceptional so it could be interesting to be part of the whole History (Guizot, 1830). The historical value was related to a more symbolic value in the sense that its tale was stylized in order to be able to remain both remarkable and remembered as it allowed for veneration and patrimonial emotion (cf. Fabre, 2000b). This was the case of the intervention at the École des Mines where the aim was clearly one of symbolical production in respect of the elite engineers it had trained for the past 200 years. As the project manager explained:

“It is a bit of a showcase ... it is a lecture hall which is widely used and shapes the school's image abroad ... In terms of structure, there is not much that must be kept. By contrast, it is subtler: that which must be restored is its spirit. This [intervention] is a prestigious operation. It is part of a much bigger drive, it is the first stone ... well the first stone: it is a more of a signal to indicate that the school is being renovated ... is waking up!”

Again with regard to historical value, another historical feature that needed to be considered was rarity, especially when the building’s singularity itself was enough to justify and underline its uncommon nature in a dedicated context, and thus its significance (Pomian, 2003). This was the case for Sølvgade Skole, as one Professor of School History confirmed to me:

“Sølvgade ... it is the oldest Danish elementary school which is still working. That is probably true. I mean, there are others in Denmark but they are not schools anymore. So that is probably what makes it interesting, it is that it is still functioning as a school ... so it is probably true that it is the oldest!”

However, such historical value can hardly be understood by a non-connoisseur who does not have the knowledge to appreciate valuable building characteristics (Riegl, 1903 quoted in Heinich, 2009). This was the reason why a second – artistic – value officially supported the former. Intertwined with aesthetic and architectural concepts, the goal of this value was to make explicit the Beautiful of buildings, as the regulations did not provide a clear definition of what was meant by this. Regarding this value, actors favoured overall cohesion: more abstract cohesion between the building and a cultural frame of reference but also tangible cohesion regarding the material shape. To do this, actors attached to this value a scientific consideration in order to qualify the artifact as such and underline to what extent such characteristics were relevant and sufficiently representative to be included in the list of values within the building proposal (Heinich, 2009). Based on Junichirô Tanizaki's philosophy of colours (1978), and using a counterexample, the Sølvgade architect outlined the appeal of respecting country specificities:

"You know, people from Denmark go to Greece and then they come back and they whitewash their courtyard and painted it turquoise blue and it just looks like shit because of the light: the difference is in the light. So you cannot recreate that if you do not adjust the colour to this climate to fit the weather"

At the same time, actors privileged the building's appearance, i.e. its aesthete beauty, they evaluated through perceptive criteria. Specific architectural concepts were thus mobilised to define the beauty of a listed building. Nyboder's architects for instance clarified the artistic value of the buildings by highlighting the harmony of the rows:

"For instance, when you view the yellow Nyboder, you feel the strong rhythm of it: that is an architectural value. Even though the houses are quite different, some of them were built with staircase, with apartments on both side, some have only one apartment in one site ... there is a lot of differences inside. But outside you still have this very obvious rhythm and that is a value ... and the physical aspect where the value is stored is in the window for instance. You

cannot close a window here because that would interrupt this value. You have also the chimneys, which you cannot remove because it will interrupt this value.”

The challenge was also here to promote the national cultural Heritage and attract foreign tourists (*ibid*, 2007).

The last value indicated the need to protect the surroundings – Danish Art. 2-3(2) and French Art. L621-30 to L621-32. This rule, previously known in France as the “Outskirts Law”, defined a 500-meter-protection perimeter in which building works had to be subjected to State authorisation in order to avoid breaking the homogeneity in the field of view around the listed building. This regulation, which the actors in the study did not implement, was thus used to demarcate a security area because, as one CPO architect told me:

“You do not, for example, in the little historical area in a town suddenly decide to make a skylight house or something like that!”

Paradoxically, the regulative tool was very useful for actors to determine values as they could bypass it. Indeed, as the materials *in situ* could convey and store Heritage values, the LBI’s laws provided exemptions even though such materials did not respect the overall building regulations (for instance, the Danish Building Regulations 2010, BR10 and the French Thermal Rules, RT2012). As one architect expounded on the choice of materials vs. current regulations:

“we [the architects] are completely free and the only aspect we should take into consideration ... actually we have to follow the normal buildings regulation; but you could get dispensations for everything except for fire [...] if you have a door, for instance, that is not fireproof enough, if you just do not make it any worse, you can keep it as it is”.

Indeed, the respect for and importance of the two main values overtook contemporary and regulated issues, like the access for people with reduced mobility into all listed buildings. One LBI actor, with close links to an international Protection Society confirmed that Heritage values take precedence over regulations:

“Disabled people lobbied heavily, and where possible, we try to adapt buildings. Let us take Notre-Dame-de-Paris, where people climb on top of the two towers. We will not install lifts in these towers: it is not possible! And here there are no exceptions; it is an on-going struggle for the CPO architect who says, “No I will not apply such accessibility!” This is an anti-regulatory imposition of a political will because if tomorrow we install lifts ... well we will have to demolish everything! There is no empty space for elevators, so at some point we must say: a disabled person can visit the inside because pathways have been built but they will not go up to the towers and that is that!”

In a similar vein, this regulative tool was sort of weak in the sense that such laws have been formulated in a blurred way that focused neither on a clear definition of what a listed building was nor on practical discriminating criteria that could really help actors to underline certain values (Choay, 2007). As multiple actors confirmed during the study, the regulation did not ask for and hence did not provide the “*listing motivation*”.

Consequently, the official reasons why plenty of listed buildings had been listed remained unclear or unarticulated. In Denmark, this situation was reflected in the precise but paradoxical mission of the Board of Cultural Heritage (BCH), which was either to show history to people by freezing a building in time or to protect a given function to enable the building to keep evolving (cf. Art. 1 and Art. 2 of the DALBPBUE). In France, this situation manifested itself in the brief biography of the building and the exhaustive collection of pictures without many details that summarised the protection applications. Furthermore, in both countries, it was important to notice that, for the studied buildings, there was no written evidence detailing their attractive values and why they deserved to be preserved or not. The reasons for this varied between the two countries. In Denmark,

buildings, which were listed before the promulgation of the initial DALBPBUE during the 1980s, did not get an official values checklist. For instance, in the case of Nyboder, which was listed in 1918, the LBI architects in charge of the listing “just wrote “Nyboder: listed””. In France, the symbolic power of certain buildings was so strong that the actors themselves could not detail their overpowering and dominant values. This was the case with the French Pantheon, which the actors considered as “a cultural object in its own right”, and “a particular [listed building] case because of its dominant value, it is the symbol of the [French] Nation”.

The regulations therefore allowed qualitative personal evaluations, i.e. value judgements, as a systemic and official analytical framework did not exist *per se* (Knoepfli & Hering-Mitgau, 1985). Such practice led to discussions between actors, who submit to each other their own interpretation of the LBI regulations in order to develop a shared interpretation. *De facto*, the LBI regulations acted as guidelines to design a collective vision of authenticity among actors through recognised and official building values. They gave a formal approval to buildings that had already been protected and thereby legitimated. In short, they provided guidance for actors regarding the choice of the values that mattered.

2.3. The normative tool

Beyond dealing with the previous regulative uncertainty, and because every official document was not that useful, all the actors used a normative tool to enhance proper arguments which could influence discussions on the relevant and authentic values of the building and hence the inception of their own document, i.e. the building proposal. This normative tool, equivalent to a shared practice, was based on the concept, used by every LBI’s actors, named *Genius Loci* – the “Spirit of the Place” (Norberg-Schulz, 1980). It stemmed from the LBI actors’ interpretations of various previous international cultural Heritage working papers where it was implicitly codified.

Around the mid-20th century, two main documents, produced under ICOMOS and UNESCO World Heritage Centre initiatives, were created to make recommendations and

drive, or at least help, actors to evaluate authentic building values: the *Venice Charter* and the first *Operational Guidelines for the Implementation of the World Heritage Convention*³³.

Signed by major European listed buildings specialists in 1964, the Venice Charter (VC) still remained the cornerstone of practices in listed building works, even though more recent doctrinal texts have emerged in relation to this specific question and relative topics, e.g. the *Paris Declaration*, which focused on Heritage as a driver of development (2014)³⁴. Its leitmotiv was formulated through Art. 11: "The valid contributions of all periods to the building of a monument must be respected, since unity of style is not the aim of a restoration. When a building includes the superimposed work of different periods, the revealing of the underlying state can only be justified in exceptional circumstances and when what is removed is of little interest and the material which is brought to light is of great historical, archaeological or aesthetic value, and its state of preservation good enough to justify the action. Evaluation of the importance of the elements involved and the decision as to what may be destroyed cannot rest solely on the individual in charge of the work."

By insisting on the materiality of the building, the text underlined the limited extent to which actors had to toe the line of previous interventions so as to respect the building's balance between its patrimonial values and the newly integrated materials, which therefore needed to be exceptional. Indeed, actors should respect the legibility of the successive strata in order to differentiate the original and the addition, so the latter could be removed, or reversed, if those responsible for further interventions found it uninteresting, i.e. not authentic. Yet the notion of "reversibility" was not explicitly formalised within this Charter, although authenticity was given a restricted definition as Heritage values were only associated with the original materials *in situ*, as some actors indicated during their interviews:

³³ The latter document is updated on a regular basis. The last version, which modified some of the 2013 articles, was released in 2015; cf. <http://whc.unesco.org/archive/2015/39com-11-Annex1-20150707-opguide15-en.pdf>

³⁴ An exhaustive list of Charters and doctrinal texts can be found on <http://www.icomos.org/en/charters-and-texts>

“reversibility meant removing as few original materials as possible”

Accordingly, actors adopted practices that distanced themselves from the Venice Charter, as it could be apprehended in different and paradoxical ways, especially regarding the “cumbersome” reversibility concept:

“Well in relation to the VC, you can do anything and everything. You can have completely different interpretations and each time you can use the pretext that what you did is part of the VC. When you missed a restoration, you can say that it is part of the VC because all the stones that you have messed up, you can say that it helps the readability of the monument and properly highlights the intervention ... Viollet-le-Duc himself, for Notre-Dame-de-Paris said, “I will touch and replace as few stones as possible, I will retain the strata, I must be modest!” What a doublespeak [as I detailed above, he changed a lot of things and included for instance a statue of himself on one of the cathedral’s roofs] ... but it is the way he got the job, by saying “I will rebuild it identically.””

Moreover, regarding the actors’ aim to maintain the building function, and to spread contemporary adjustments into the building’s overall authenticity, the implementation of such a paradigm was paradoxical, or at least not enough, since, as both a curator and a patron said:

“the more society technologically evolves, the more we must adapt the building to contemporary use”

Therefore, beyond the taken-for-granted fact that materials carried Heritage values, actors pursued their evaluation of values further with the help of the Operational Guidelines for the Implementation of the World Heritage Convention, which was ratified in 1972 and acted as a shared reference to universalise considerations for listed building all around the world (Choay, 2009). More specifically, it was its interpretation based on

the Genius Loci which became the accepted and legitimated prescription that ruled intervention works on listed building. Indeed, with the exception of the function value, which was considered missing until the Nara proceedings (Cleere, 1994: 60), the value evaluation criteria in 1972 to test the building's authenticity closely resembled the philosophical concept.

The current definition of the Latin phrase, which etymologically meant, "a guardian spirit or god associated with a place", has stabilised around "the essential character or atmosphere of a place" (Oxford English Dictionary, 2015). In its contemporary use, this concept captures the building's soul according to five themes with which architects ascertain values that should be respected or updated and complement the formal regulations on the protection of buildings (Olesen, 2009): holistic, architectural, function, material/physical, and perceptual. Through the discussions which this produced between architects, project manager and the CPO, the Genius Loci acted as a methodology to evaluate values and hence succeed in challenging the issue of modernising listed building hinted at by Norberg-Schultz himself when he underscored that, in case of building works, "only when understanding our place, we may be able to participate creatively and contribute to its history" (*ibid*, 1980: 202). According to Olesen, this definition could be completed "with affection for life's fulfilment in continuously improving settings". In the cases studied, while each actor did not use the five values listed above each time, all of them hailed the Genius Loci at least once as a way to capture the underlying values of a building. Moreover, they all mentioned the original building design as a way to evaluate and consider what should be respected during the works and what they could do and add. The original building consideration was the condition *sine qua non* to implement the Genius Loci practice.

The first value actors focused on was the holistic value. This value considered both the building's location but also intangible elements in the surroundings, *i.e.* fauna, climate, etc. For instance, in Sølvgade Skole, this value was respected by the lead architect, who took account of the surroundings, such as existing neighbourhood colours and shapes, while integrating them into the new extension:

“We of course needed to design a modern building but we also wanted to respect, to pay respect to the shapes of the area, the morphology – I guess is the right word for it – and also the colouring. As I said with the tweezers, the little acupuncturist kind of small detailing, that sort of ... we are listening to the neighbours here, this is important. So another important obvious factor of this is, conceptually in our office, we always work very strictly with “Genius Loci””.

The next value was the architectural value. While referring to elements coming from the regulation, this value emphasised both artistic and structural features of the building. The latter, when it mattered, needed a value treatment on its own as it was innovative for the time period in which monument was built. This was the case during the intervention on the French Pantheon according to the lead architect:

“From a structural point of view, this building is absolutely brilliant! It is very complicated but absolutely brilliant! At that time and especially for the Pantheon, engineers began to calculate structures. And for that, they developed machines that did not exist before: some machines to crush the stone for example and to see to what resistance can reach the crushing of stone ... so you can say that the Pantheon was the first monument that was truly calculated. So, in the History of architecture it is really important because it opened the door for all nineteenth and twentieth century buildings and for reinforced concrete. I am telling you all of this so you can see the importance of that building for both architects and engineers!”

Utility, or function value was the third value. Beyond the building’s “long-term potential”, this value highlighted the intramural experience for conceivable stakeholders while including an analysis of the suitability of the building’s settings to keep its authenticity intact. As the patron of Nydober explained:

"We always have a discussion about what we called the Genius Loci; I mean, the soul of the house or the fairy dust of the house ... You know the engineers, they will shake ... they will know "the architects are crazy", but a philosopher would say "yes that is what it is all about", that the house sort of keeps its soul, keeps its narrative and brings it from the past into the future through the conservation of its function."

The physical or material value is next. With a high level of interest for the aesthetics features, the focus here was on the type of materials used – and sometimes their associated technical characteristics. This was the key aspect actors had to respect, so they could play with underlying values as the Heritage was carried through such appropriate materials, either the originals or not. The client of the Munkegård extension provided a good description of the material value:

"Even the green carpet on the floor and the blue skylight up there are original. So it was very modern at that time [...] then we have also changed elements, which actually go into the original building and take up the original design and [new] original materials. So it would appear visible in few places in the school [...] and those are the most problematic I find because there, the authenticity is being challenged."

Last but not least is the perceptual value, *i.e.* the experience users capture when they explore the building and what they expect while doing so. Molitor swimming pool is the best example of this value, as it was totally hollowed out before its complete reconstruction. Indeed, as the lead architect explained in detail:

"So what is really protected? Here, we are in the immaterial part. I mean what has been protected is the Lucien Pollet's architecture in both its overall perception and details. But here we are clearly overwhelmed with a collective memory, which is linked to an urban design and a function. However, it is a certain success to maintain the function of the building as a swimming pool

with an enclosed pool for winter and an open one for summer. Therefore, today, the spirit of the place is still a swimming pool where people meet and have fun. It was dead for thirty years and now it is resurrected: it is there again!”

However, even though the implementation of a Genius Loci practice seemed systematic in the different cases, as it helped actors to end up at the writing stage of the building proposal, the interventions, either restoration or renovation works, differed according to the protected values and what it was possible to implement or adjust on the building. This values evaluation also depended on the actors present and the official notice or directive given by the CPO. Consequently, as different interviewees pointed out:

“Each listed building construction project is different from the other”

“We try to establish specifications in certain departments by saying “before they ask us something, they already know what they should do to protect their Heritage”. But the problem is that such specification is ... I mean it is ... in practice there are so many different cases.”

“I do not really know how we could make the most of our different listed building works.”

2.4. An a posteriori construction

According to how they mobilised these tools and their complementarity, the actors collectively designed the authenticity they had to respect. Such authenticity was discussed, first during formal meetings between the client and the chosen architecture firm and then with the CPO architect, who in most cases had to comment on the intervention proposal before approving it. Indeed, if the CPO refused the proposal, the client and the architects then redefined what mattered for them. In the case of the

Schlumberger Lecture Hall for instance, such meetings were compulsory because even though they all recognised or took-for-granted its protection and never discussed this point – *cultural-cognitive tool* –, the actors did not agree on the underlying values of the École des Mines building. On the one hand, the CPO architects, who appeared to have no specific knowledge of the building, judged it only in an aesthetic way according to their skills based purely on what the regulations advocated – *regulative tool*. It was therefore not enough for the client, with the support of the chosen architects, who, on the other hand, brought specific values related to the building's function as a world-renowned engineering school and its perception – *normative tool* – which had to be emphasised by the renovation works. Indeed, the client was convinced:

"that the school Heritage relies on its capacity to be at the forefront of progress and that is what we have to transmit and broadcast, no matter what we decide to use materially!"

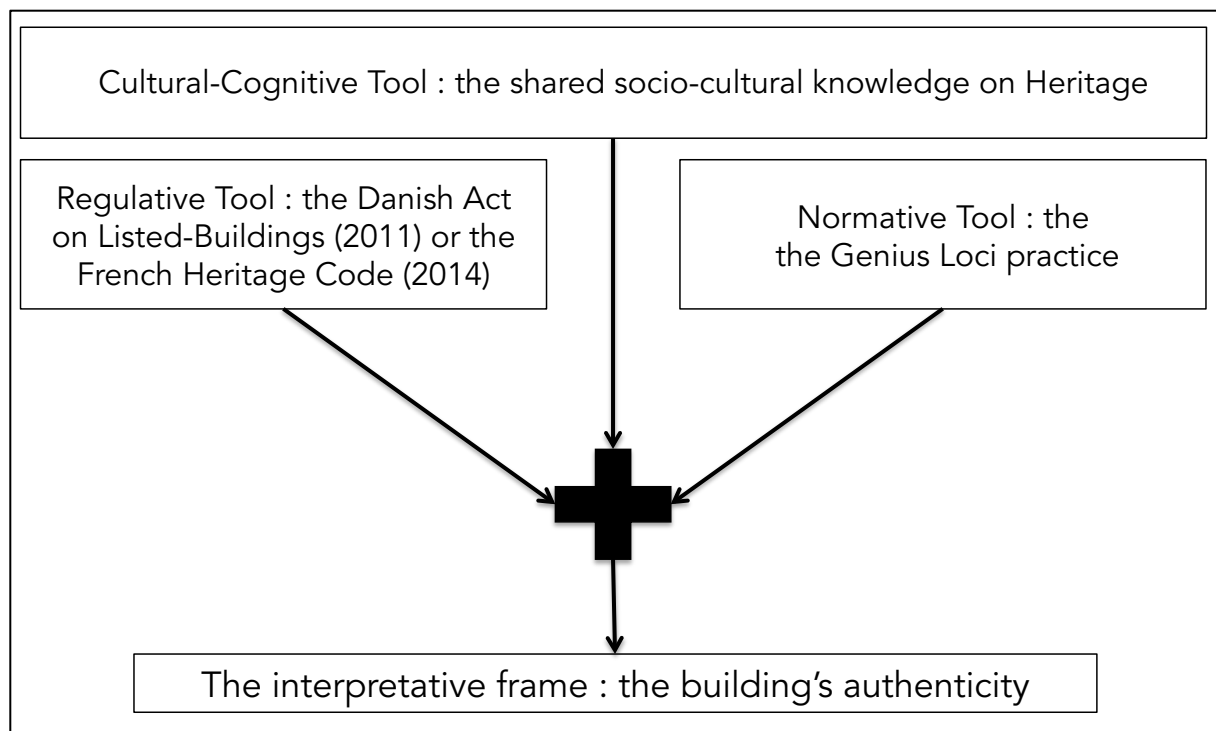
Such subjectivity, related to the absence of a formal method of evaluation and classification, was thwarted during the meetings where the various voiced set a minimum debate. In the case of the École des Mines, the school's members used a lot of stories to convince the State architects of the possible cohesion between their different visions of the building's essential values; e.g. the client used the intramural Mineralogical Museum as an example of a twenty-first century *"curiosity cabinet"* around which all scientific disciplines from the French *Latin Quarter* gathered thanks to the key topic of the school. The discussions ended when a shared vision was found between all the stakeholders and their prioritised value. As one CPO architect told me:

"maybe this building has been used as a school forever. So it is very important it can function as a school. In that case, we might say "ok we have to go and compromise"

The main compromise regarding the values of the École des Mines was made based on the CPO's demand not to disrupt the aesthetics for the function. So while they were not

allowed to modify or hide the multi-period façade and carpentry, the strengthening of the roof-structure for a future desk construction to host academic events was approved. Such a value compromise, the result of which highlighted a prestigious and world-renowned engineering school located in a historical town house, was therefore materially treated (as explained to the reader in Chapter 7).

Figure 10. The interpretative frame design



To sum up, defining the building’s values, previously unformulated but yet protected, led to the symbolic construction of the instantiation, as it provided the frame of building’s authenticity that actors translated into the building artifact so it could be maintained within the LBI through the official listing system and despite its upcoming transformation. *De facto*, each listed building’s authenticity was thus an *a posteriori* construction, which emerged from an interpretation of cultural-cognitive, regulative and normative tools that defined the essential values that should be protected, and ideally respected, during the listed building works (*cf.* Fig. 10).

The director of Molitor confirmed that the designed frame could shape new borders in a building's authenticity. Indeed, through a reconstitution of a previous discussion he had with another stakeholders:

"I have the absolute pretension of that [i.e. of shaping a new building's authenticity for Molitor]! Not me personally because I was not alone but of course it does shape a new authenticity! Nobody comes for the original mosaic: nobody cares! There are two things. The first decision was to say "listen, let us reconstruct those damn pools and you can do whatever you want around them. And then the second decision was, what do we do around the pools?"

- *"Guys in bathrobes, a spa; that would be very nice ...*
- *"Euh sorry, where is the fun in that? Do you know what happened it before? Where is the graffiti, the street-art? When I enter the building what is going to surprise and entertain me? Will I be able to see the pool? No! But you are crazy ... [...] most importantly, what is the story you are telling me? Again, accompany me, when I pass through the front door, what do I see?*
- *Well first you will come to a door with automatic detection ...*
- *Wait, I do not care: what will surprise me?*
- *Well, you will in a listed-building!*
- *I will be surprised to be in a listed building? Come on ... no one cares! So let us take a deep breath. When I will enter the lobby, I will look at works of art, just as the people who worshipped Molitor liked it because it was a crazy place, because every time they came there were new artworks by new artists, etc. That is what people remembered about Molitor. F*** it is thanks to that they will regain such a state of mind and dynamism. Here is the listed building!"*

Consequently, this fabricated and evolving authenticity, or perception of the building's Heritage, became a shared *interpretative frame* around which all the actors' subsequent

decisions would be taken. Indeed, for the stakeholders, the design of this frame was relevant for them to understand and know to what extent they could manipulate the listed building while remaining within the boundaries of the institution that protected it.

3. Discussion of Chapter 6

3.1. A frame built using the three pillars

Through the findings, I suggest that the institutional frame is designed while using the main institutional elements, *i.e.* the pillars. Because the frame is a micro reinterpretation of the institution (Goffman, 1974; Pratt, 2000) and because, within SCI, the institutional frame is largely dependent on ideas coming from its embedded resources (Brunsson & Sahlin-Andersson, 2000), are there more obvious or relevant elements to use than its constitutive ones in order to shape it? Paradoxically, this idea remains implicit in the literature previously quoted in Part 1; this is the reason why the core of my primary contribution in this thesis is to extend the understanding of institutional frame design.

Within SCI, if its essential role in the act of translation is well studied (*cf.* the SCANCOR³⁵ stature explained in Boxenbaum & Jonsson, 2008: 92), as well as how *framing* could be a solution to resolve institutional pressures (Djeclic & Quack, 2003; Borum, 2004), how a frame is built and what its main components are remains blurred, or at least suffers from a lack of empirical evidence (Cornelissen & Werner, 2014). Indeed, scholars have only focused on the role of framing and on how actors implement such a shared cognitive vision to interact with the institution in which they are embedded (e.g. Battilana et al., 2009; Jones et al., 2012; Rao et al., 2003).

Nevertheless, other scholars have hinted at the question of the frame constitution, which, as an institutional interpretation, could be constituted by beliefs, norms and/or rules. As Sahlin-Andersson (1996) and Boxenbaum postulate (2006), the frame can be based on

³⁵ The SCANCOR is the Scandinavian Consortium for Organizational Research located at Stanford University, CA. For more information: <http://www.scancor.org>

cultural-cognitive, regulative and normative components – which shape in the latter case a dominant logic (2006: 940). More recently, Werner and Cornelissen (2014) also discuss this aspect while defining a tactic of *frame-shifting* as a way to re-interpret existing institutional features by designing an alternative schema of interpretation (*cf. ibid*, 1974), which is the result of consensus among actors on analogical opinion about what they do and should do regarding the outcome they have to create, regardless of either it is symbolic or material. However, even though such a model fits with what I noticed in the empirical context, these authors also overlooked the main roots of what an institutional frame is by taking-for-granted the original institutional settings.

Therefore, to develop previous discoveries and provide the necessary empirical evidence, I highlight in the study that the creation of this frame can be the result of a symbolic collective interpretation intertwining the three institutional pillars. This suggestion appears as a new frame design strategy that echoes the recent study by Bohman and Raitio (2014), who indicate that actions are made regarding the institutional resource realities, and rules of the game, but also regarding how actors perceive and define the situation at hand. As Bohman and Raitio wish (2014: 250), my empirical case displays to what extent actors intentionally and collectively construct their realities and line up their interests regarding their shared aim and what the institution advocates.

And because they remain the only way to capture an institution (Farashahi et al., 2005), pillars represent the best institutional resources available to help actors design a collective interpretation. Indeed, in that case, pillars can be considered as resources as they constitute, and sometimes materialise, the institutional legitimacy which itself represents the resource on which the institution is based (Chung et al. 2015), as Feldman and Orlikowski argue, “the term resources in use denotes that it is the combination of thing and use that makes a resource” (2011: 1246). Moreover this three-part-divided legitimacy fits with Lévi-Strauss’ resource definition (1962/1966) as the institution *per se* is a structure that compiles legitimated myths (Meyer & Rowan, 1977).

Furthermore, with the empirical analysis and the quest of the actors to create a shared and objective symbolic outcome despite their various individual interpretations of the institution’s legitimacy they needed to preserve, I provide here an example where the three pillars evolve together with more or less complete integration following their

ontological resistance that makes it almost impossible to perfectly align the pillars (Mizruchi & Fein, 1999, Scott 2013). Through the “building’s authenticity” design, the analysis illustrates how actors navigate between the three elements to define an *a posteriori* shared frame. This phenomenon explains why some pieces of institutional elements are left behind when a frame is constituted (Schön & Rein, 1994) and why, in the cases studied, great leeway with regard to the overall request or requirements was possible. Indeed, different choices between considered values were made when the actors worked on listed buildings while deciding to protect one value instead of another (cf. Scott, 2010). Finally, my study confirms that the use of the same institutional resources may lead to different outcomes (Dacin et al., 2002) while at the same time anchoring and maintaining the institutional legitimacy that drives collective action (Rouleau, 2007; Bitektine & Haack, 2015).

3.2. The extended role of the interpretative frame

In the study, designing the frame, and thus providing a unique interpretation among actors, enabled various scopes for action because the actors used it for different, albeit associated institutional purposes regarding their shared objective of modifying an instantiation.

By clarifying and unifying the actor’s numerous interpretations of the institution and on what characterises it, the frame leads and influences the future decision-making process regarding how the instantiation should be modified while continuing to maintain and emphasise the institutional features and new requirements, e.g. new regulations associated with the building’s function. Furthermore, the study of the agency, and the focus on how actors discussed and sometimes compromised on the choice of what symbolically mattered – e.g. values –, show how they collectively interpreted the institution in order to mostly legitimate such decisions. By analysing this, and in relation to Quinn-Trank and Washington (2009), I find here another example in which actors reinforce the legitimacy of an institution while interacting and manipulating its core elements that should be respected or could be bypassed.

So institutionally speaking, the symbolic construction serves to enhance the legitimacy of the institution, inasmuch as it reflects the three institutional pillars (Scott, 2008a). *De facto*, this cognitive and interpretative frame constitutes the link that exists between the institution and the instantiation as it helps actors to relevantly translate the overall institutional interpretation into an artifact (Czarniawska & Sevón, 2005). Indeed, while studying how actors mix institutional elements, as I observe in my empirical case, actors assess a shared frame only in order to lead their choice of the materials they need to preserve or add in the existing artifact with regards to the boundaries of the interpretative frame, which they themselves make explicit. As I highlight in the manuscript, their initial aim was to design a frame that would allow them to materially modify the instantiation while keeping its institutional legitimacy. So with regards to their wishes and current field circumstances, all the actors examine from all sides how they should define the same meaning so it could be conveyed within the same institutional order (*cf.* Mazza et al., 2005).

Furthermore, through the means of maintenance and by thinking about the material interaction and reconstruction of the artifact they have to modify, actors reproduce various aspects of the past to meet what the present needs (Peterson, 1999) – and in the empirical case, they therefore developed one contemporary building's authenticity based on existing institutional elements. Or, as Hargadon and Sutton argue (1997), actors view old solutions from a new frame of reference that allows them to recognise certain useful characteristics through materials and to ignore less transferable features.

This shared interpretative frame acted thus as a condition *sine qua non* that enabled collective practice as it was used as the dominant reference knowledge that shapes and leads the subsequent actions of translating the frame, *i.e.* materialising the instantiation. This also confirms the prediction of Bohman and Raitio (2014) who argue that the idea actors can have of reality can reinforce its materialisation and vice-versa and thus influence future decision-making on how such instantiation should be built.

Through that link which it establishes between the institution and the instantiation, the frame is thus considered by actors as a form of collective knowledge with which they can engage a dialogue, as it permits the stakeholders of a project to know to what extent they can tangibly manipulate the artifact while remaining within the boundaries of the

institution that protects it. Indeed, actors use the single outcome, the interpretative frame – they created through the combination of three institutional pillars – as a collective resource they shared. I analyse here the same phenomenon as Garud and Karnøe (2003) when they studied the elaboration of an outcome based on a previous one. Here the pillars are used as tools: the designed outcome being used as a new resource, etc. – a postulate which also respects one of Lévi-Strauss’ bricolage leitmotivs (1962/1966).

This impact of designing a frame to facilitate decision-making, although it was already analysed in the literature a long time ago (Lukes, 1974), is extended as the dissertation brings a new perspective on how a collective action starts while underlying the importance of a shared worldview among actors, or cognitive structure, to initiate collective decision-making. Back to the case, the interpretative frame thus helps decision-making and plays a role in both symbolic and material build-up between the “old” and the “new”, the main decision remaining the collective choice of material resources at hand.

Chapter 7: The collective bricolage of the building: the material construction of the instantiation

1. Balancing the artifact construction: intertwining the “old” and the “new”

1.1. *An addition of two approaches*

Because buildings were designed not to adapt, they had the perfect memory of materiality and when actors dealt with existing building, their decisions were always made regarding its previous *fait accompli*, i.e. its material state, so they could foresee its permanence (Brand, 1995: 2). Therefore, regarding the natural life and evolution of a building, both its preservation and the rise of new ideas in its surrounding field – e.g. the sustainable development paradigm – called for insight into the dynamic through which such listed building underwent building works and the integration of new materials.

To respect the LBI's limits while transforming the building into a modern installation to keep it functioning as it always did (Diez, 2012), but at the same time to permit it to fit contemporary requirements (Rajagopalan, 2012), the actors managed the coexistence of “Heritage” and “modernity” by using and combining resources at hand. These resources could be physical objects and their associated values and rules, but also the building's authenticity frame they designed for the purpose of respecting it through its translation. It was with the help of the building materials that the stakeholders played with the values they needed and wanted to highlight through the intervention, because in such a building construction process, as one architect said:

“... you analyse the building in terms of its concrete values, its significance and the different physical aspects where the value is stored in the building.”

With the implicit knowledge associated with them, the actors used the material resources coming from the “old” and from “new” to achieve this concrete addition which led to targeted respect for the pressures of the field, which was the main objective all the stakeholders collectively tried to fulfil, as:

“The idea is to make the building as attractive and as modern as possible without putting the values in jeopardy. That is actually the point of what we do.”

Indeed, beyond the building’s survival, the major aim here was to protect the embodied Heritage from risky modern practices that could erode the authenticity of the building but that was necessary so common people could ineluctably link their vision of the past to the present (Lowenthal, 1994). As one Nyboder architect expressed:

“Keeping that function is one of the values of the building. But to make sure people want to live in small apartments with low ceilings ... you cannot make people live like they did four hundred years ago: people will not have old furniture and go out in the garden to shit ... it does not make any sense to make people live in a museum. It is a question of keeping the building as a reminder of ... a kind of a modern documentary value of the building so they can imagine how it was.”

As old material resources were the existing materials, shapes and structures *in situ* – e.g. wooden carpentry – on the contrary, the resources coming from the “new” were the new materials actors were used to working with and knew already how to get access and use – e.g. a material owned by a member of one stakeholder’s network that did not initially participate in the project. During the study, no actors looked for breakthrough or innovative materials they did not know about. As one State architect confirmed:

“[During an intervention] on a listed building site, there is no innovation at all”

Because “it [was] much easier to continue than to begin” a building story (*ibid*, 1995: 105), these new materials were thus related to some institutional jolts that actors had to take into account so the building could survive and be used. For instance, Realdania, which was one of the richest patrons in Denmark regarding listed building works and whose measurements were very quickly followed and legitimated, released various guidelines in March 2010 as part of a document named *Modelprogram for Folkeskoler* (Guideline for Elementary Schools). This document underlined the modern installations Danish schools were required to implement in order to enhance the academic achievements of pupils.

Within the LBI, the findings suggested that the combination of resources at hand appeared as the result of an internal dynamic between two apparently conflicting forms of actions: the action that triggered the respect of the listed building and the action that tried to bypass it. This combination was achieved in two different ways. On the one hand, actors were looking to respect the building’s mythology, *i.e.* its original use, function or value: *the enactment of Heritage*. On the other, they practiced mimicry by integrating new elements, drawing on the old ones without breaking the new features allowed by the new materials: *the adaptation of New*. The actors used new materials with their own features while keeping the essence or the shape of older ones. But they had to be careful because, as already explained, if the new building did not fit with the “listed building” features, or with the designed interpretative frame which they had to materially translate, this could jeopardise its listing.

1.1.1. The enactment of Heritage

In case of listed building’s intervention works, the main priority of all the stakeholders was to maintain the legitimacy of the listed building as a carrier of the LBI while respecting the frame “building’s authenticity” institutionally protected and collectively designed by the involved actors. And to respect the LBI leitmotiv – “*Heritage always comes first*” –, actors worked on the values embodied by building materials in a variety of ways.

Following the interpretative frame they made in the previous step, taking into account the building's values in order to understand the place and contribute creatively to its history, the stakeholders knew what they had to highlight despite, or via, the works. However, while their main concern was that *"if the new building does not fit with the listed building standards, it will no longer be listed"*, the interpretative frame varied between monuments, as did the associated values actors had to respect in each building. Consequently, how actors prioritised building values and how they handled those artifacts to comply with them differed from one specific project to another. For instance, in Sølvgade Skole, the main value that was taken into account was the holistic value by playing with the uncommon but existing surrounding details, as the lead architect expounded:

"I have always been a quiet architect in a sense, you know, in my buildings, they are very quiet and very respectful and I am not like "I need to make a big icon" but I am very happy that it has a lot of, in my view, thoughtfulness about the historical surroundings, so that if you stand down and you are looking at it and you try to think a little bit, you will start to understand it more and more!"

In the École des Mines it was the function or use-value that shaped the new works. As the building proposal for the interventions on the Schlumberger Lecture Hall outlined (2014: 2):

"A glazed opening from the amphitheatre to the gallery enables the creation of a bright and visual continuity, like a window of the educational outreach of the school"

So in order to respect the developed building's mythology in material terms – and the associated list of values – and beyond that to define the authenticity previously introduced to the reader, actors first of all used regulation. More specifically, the stranglehold of the Heritage was stronger via regulations because the actors in both

countries were more or less obliged to follow the current building regulations which they could adapt in respect of what they needed and what they wanted to preserve. Actually architects could circumvent current regulations if necessary to respect the Heritage. As the lead and CPO architects for Nyboder explained to me:

“Heritage comes first! If you start a building ... building a new building today, there are quite strict rules on how to think about ventilation or insulation under hard-roofs, walls, etc. ... You know there are so many rules, so so so many rules on how to build a new house ... And listed buildings are not ... do not have to follow these rules! [...] I do not think they will ever have to follow the rules in place for new buildings.”

Reciprocally, the regulations started to formalise dispensations or alternative solutions in order to establish more firmly the importance of Heritage in the case of interventions. This was the case for instance in the Château de Vincennes in France, where, as one French CPO architect confessed:

“there is no elevator inside [to enable disabled people to climb the tower]. However there is a screen broadcasting a clip which introducing all the spaces in the dungeon open to visitors. As they cannot visit it, this makes up for it and it is what the law advocates.”

Moreover, there was further leeway within the regulations that affected the compulsory and official building proposal or permit validated by the CPO. Not respecting this could lead to drastic and legal consequences. As LBI's actors were all embedded and subjected to constitutional States, one CPO architect confirmed to me that:

“every actor is supposed to follow the building proposal or permit, and if they violate it, they go directly to jail! Come on, we are not kidding!”

However, and in a radical manner, the building proposal could be overstepped. Indeed, one of the actors during the study explicitly told me that, as project leader, she/he took the gamble of intentionally ignoring it³⁶. This hinted that the client and the architects could do whatever they wanted to do as long as it promoted Heritage and how they imagined it should be:

"We took a huge risk there ... as the decision was made to say we will build an object that is not in accordance with the building permit and we do not care because it is essential to revive this building [...] And at the end, the CPO agreed with us!"

By letting the architects go beyond such regulative requirements, this expressed that what was on site could be left as it was, even though it did not meet the current needs or obligations – cf. the example of Notre-Dame towers vs. the accessibility issue. Tacitly, the Heritage was materialised by what was physically already there. As one Danish CPO architects explained:

"if you have doors and detailing that can be preserved, they will be preserved"

Indeed, during a renovation/extension project, the architects respected the different values stored in a physical manner. And the examples that underlined the wishes of the organisation to keep such physical Heritage as much as possible were numerous.

In both countries, the deepest concern in intervention policy was really structured around the use of existing materials for that was the easiest way to enhance authenticity. Consequently, it was the best way to get the CPO's approval because the State department tried to keep and protect all the changes that came through the previous times as these changes were interesting in terms of Heritage aspect:

³⁶ Regarding the promise I made during the interviews to adopt a strict anonymity policy, I ask here the reader to trust me even though I provide as little information as possible regarding the identity of this spokesperson.

“the big shape have to be respected just like the little details, you know! We try to save all of them because it tells us how people lived in these building, what needs they had, etc.”

Maintaining the original materials at hand was thus an important aim for actors and was the reason why, where was possible, the actors used or re-employed the previous materials if they were in a good condition. To do such a practice, and because iconic monuments were involved, the obvious approach was to carry out as little intervention work as possible or ideally not to touch the original material in any way because, as one State architect advocated:

“as soon as the building was touched, it underwent patrimonial alteration”.

The three schools closely represented well this “do not touch” practice as architects designed the renovation alongside the original building, which they avoided: at the École des Mines/Vendôme Hotel, they used the listed original structure and carpentry as a protective cocoon; at Sølvgade and Munkegård Skolen, they built the extension next to or under the “old” one.

But when it was impossible to avoid touching or working on such facilities without excessively disrupting the building, actors put down “old” materials, such as doors, ceilings, stones, iron, etc., and while being careful not to destroy them, they labelled them, stored them, and in some cases restored them if needed, to put them back finally when the intervention required it.

In Nyboder for instance, old doors and old windows were systematically installed, even though the techniques used to set up them were much more complicated than the contemporary ones; these techniques represented here Heritage value in themselves. Besides, the question of the building rhythm was also very important. An old chimney for instance would always be kept to respect the architectural rhythm, even if it would not be used anymore.

And then, on the contrary, if an old material could not be re-used because it was too deteriorated – like the 19th century Nyboder wooden floor, which was still in place before

the beginning of the renovation – it was replaced exactly in the same old way it had been arranged. Such a solution was indeed supported by actors when the fixing of original materials was uncertain, like the concrete repairs that were only temporary and needed full consideration at the end. For instance, architects tried to replace old stone with a material that was designed and produced in the exact same manner as before or had similar features. It was what the Pantheon stakeholders decided to do, as the lead architect said:

"So anything that can be kept in place is maintained with one exception: the stones. They are replaced but not enough to alter the general building layout. [...] We know everything about the building, where the quarries were, what the various benches were. We did not find all the quarries because some, like the Montrouge one, was no longer active, but within the Paris basin, we found the exact same type 30 kilometres away. There may be small differences in the grain, types of shells, etc., but we will choose the stones most similar to the original ones ... These are the same stones with sometimes small, but extremely tenuous variations [...] We replace as little stone as possible, within of course the limits of the building's stability. Here the link I made with the Grands Hommes is that from the moment I deal with a cenotaph and with a building that is supposed to mark the French Republic's memory, I want the marks of time as to be as invisible as possible!"

Such materials were nevertheless subjected to scientific approval that officially testified their commutable feature – e.g. the French LRMH (Laboratory for Research on Historical Monuments) in Champs-sur-Marne near Paris had this role. Paradoxically, and even if it could be extremely expensive to produce old materials as before, such material resources were often *"more sustainable than new ones"* in the long run and hence better met some of the contemporary requirements. In a similar vein, the enactment of Heritage was also pursued through the use of antique building materials, specifically whitewash or lime, which sometimes did not exist in the buildings actors were working on, but had the advantages of avoiding any degradation in the building in the long term. Such a (radical)

practice was indeed requested by a Protection Society – e.g. *Maisons Paysannes de France* and the renovation of the church of Plaisir where actors used lime instead of concrete (2013).

The objective of such an identical reproduction practice was mainly used in the buildings studied when it was possible – at least the majority of buildings' doors or hinges were affected in all cases. But:

“to pull out the historical materials and make them similar but new: you end up with a [building] that is ... that does not have the quality of the old one”.

This is why there were on-going compromises between actors on “old” and “new” materials to choose to fit with the designed frame. Regarding the question of Heritage enactment, numerous measures were therefore used to highlight it, and numerous requests were made to breach the regulations. However as each intervention had the purpose to respect, while developing it, the authenticity of the building, the challenge for the actors, and mainly the CPOs, according to a State curator, was to avoid *“Heritage Ayatollah discourses saying that Heritage is always destroyed”* and to find a relevant balance to adopt and adapt new elements so they could add something to the current material state; i.e. to participate in the building's evolving authenticity:

“which had never been frozen as it was the architects' role to develop an interesting way of doing it without hiding it even though it screwed up a lot of things”.

1.1.2. The adaptation of New

To modernise listed buildings, the integration of new elements was unavoidable. And to implement such new ideas, the architects had to translate and interpret them within the “old” while respecting the building's values. Once again, they played with materials to achieve that aim.

In practice, according to the State protection laws, and alongside a lot of modern things that could not be done, like putting on a solar panel, changing the original listed building tended to be impossible. However, these constraints made the case “more interesting” and “quite challenging” according to architects who nonetheless found a leeway to achieve such modernisation.

Indeed, as the actors had the mission to avoid transforming the building *“into a museum as they want it to be able to be part of the everyday life of common people”* and because *“this proves that we no longer have idea for the building”*, they justified the integration of “new” through its contribution in preserving the building’s original function. As one patron argued:

“What has a listed building to tell people if it is made into a museum? Yes for generations you will still be able to tell the story in apps, books or posters or something else but at some point that legacy is forgotten, and then you only have the shell unless you can continue the same functionality.”

Even a French CPO curator confessed:

“When we work on places where the function is essential, we are obliged to accept some compromises”

Keeping the function was actually the best and easiest way the actors found to highlight the building’s patrimonial values, as *“a lot of things lay in the building function”*. To fully understand this point, which obviously affected the Molitor swimming pool whose renovation totally depended on respecting its previous function, the Louxor movie theatre, in the 10th arrondissement of Paris, is the best example.

Built by Henri Zipcy and listed in 1981, it is an emblematic building that reflected the popular appeal of Egyptian culture in the 1920s. Abandoned for 25 years and completely destroyed inside, the building reopened in 2013 after its stakeholders decided, *“it will not be dumb to rebuild a movie theatre inside a building that was made to be a movie theatre”*. But because the old projection rooms were obsolete, stakeholders looked for

interesting remnants while excavating the cellars to rebuild a look-a-like theatre with new materials in order to emphasise the building's authenticity based on the France's homage to Ancient Egypt – e.g. *"Egyptian decorations and the original stage and curtain were redone, they also found an original armchair in the basement so they redid all the chairs with the same look with the small beetle above because it symbolised what they wanted to respect"*. The stakeholders' aim was to modernise the listed building so it could be economically attractive, and thus continue to exist.

The functionality of a building was a *"fundamental courtesy"*. And actors took this motto into account, especially in both of the schools where architects needed to touch and work on the old building. In Munkegård Skole, which *"was not very functional when [actors] started to work on it in 2007 and was subject to discussion about its closure"*, integrating new materials was compulsory to keep using the building as a school. Indeed, the Danish Kulturstyrelsen – or Board of Cultural Heritage – authorised for instance the use of automatically opening windows so that, in the case of over-heating, the classrooms where the children studied could be refreshed – which was recommended in the Realdania guidelines. The picture was exactly the same for the renovation of the École des Mines, as the French CPO architects confirmed that the integration of new technological solutions, such as the latest-generation control room broadcasting MOOC, would not be a problem as they reflected the function of the lecture hall and the need for the school to be a forerunner in terms of training engineers.

But the implementation of new materials may be subtler while entirely respecting Heritage aspects and the prescribed boundaries of *"building's authenticity"*. In order to do this, the stakeholders played with the new materials with a lot of creativity and in different ways.

First they re-employed the building's environment in order to legitimate new integrations or extensions and specifically to harmonise the whole while rethinking and playing with the existing structure to integrate new ideas.

This was what I observed in Sølvgade Skole. There, the architects and client approached the extension by giving the new materials they used, the form and colours present within the building's neighbourhood.

By “paying respect to the shape of the gable”, the lead architect created a functionalist façade where she integrated ventilation solutions – with regards to the same temperature issue dealt with at Munkegaardsskolen – which regulated energy consumption while staining the façade with the same colour of surrounding buildings. She compared her work with that of an “acupuncturist working with a pair of tweezers”, picking up details all around the listed building and mixing all of them to make everything homogenous and valuably consistent (cf. Picture 7):

“So as a small homage, I have made a gable here that is a sort of reminder of that gable motive in the neighbourhood here [...] And to add to more chaos, if you like, we of course need to design a modern building but we also wanted to respect, to pay respect to the morphology of the area and also the colouring. We are listening to the neighbours here, this is important!”

Picture 7. Re-using surrounding colours and morphology



Actors also practised such mimicry with existing building elements to make it easier to replace old materials with new ones. In Nyboder, when the original doors were not reusable, architects gave to the new door, made with new materials, the same shape and engraving as on the previous ones (cf. Picture 8).

Picture 8. Old and New Nyboder doors



Also, actors used the new technical characteristics provided by the new object while making it disappear under its formerly aspect. In Molitor, actors distorted the original use of a resinous material, while giving to it previous aesthetics, to replace original mosaics that were meticulously studied. As the Molitor's architect confirmed to me:

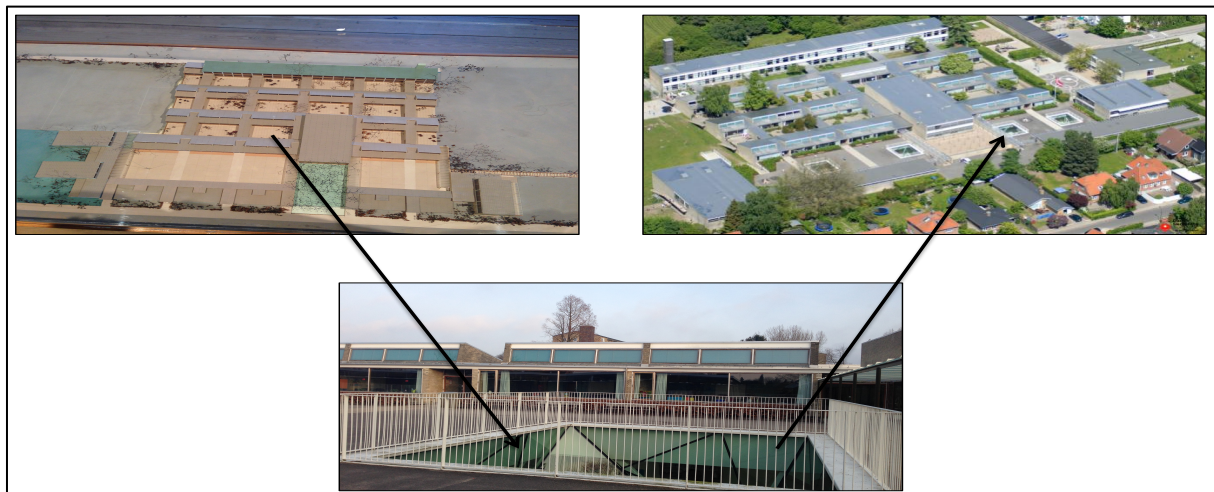
"We made a materials library and when the elements were rebuilt, we put the old against the new to check if the new was consistent, except that they had completely different technical features! Through our technical knowledge of the building, we are able to reach incredible performances."

Besides, actors practiced this imitation approach to integrate new ideas and elements *per se* within the old. In the case of Munkegård Skole, the former classroom courtyards had been reproduced with new materials during the underground extension of the

historical school and now served as a skylight (Picture 9), as the architect explained to me during the interview:

"The old school is very static. It is about all those classrooms with their own courtyard ... very modern the fact that every classroom has its own courtyard. But this plan is so very very static and there is nothing to do. That is why we had to dig, we had to do an underground extension to the school, which was under the main courtyard. [...] Also again it is very important to see what is old and what is new! We have some courtyard also in the new extension and because it is under the ground, we had to have the light, the sunshine ... so there is a new courtyard, actually it was the courtyards from the original school which were putting into the extension. So when you go to the school, you can see the motif of the courtyard in the extension too."

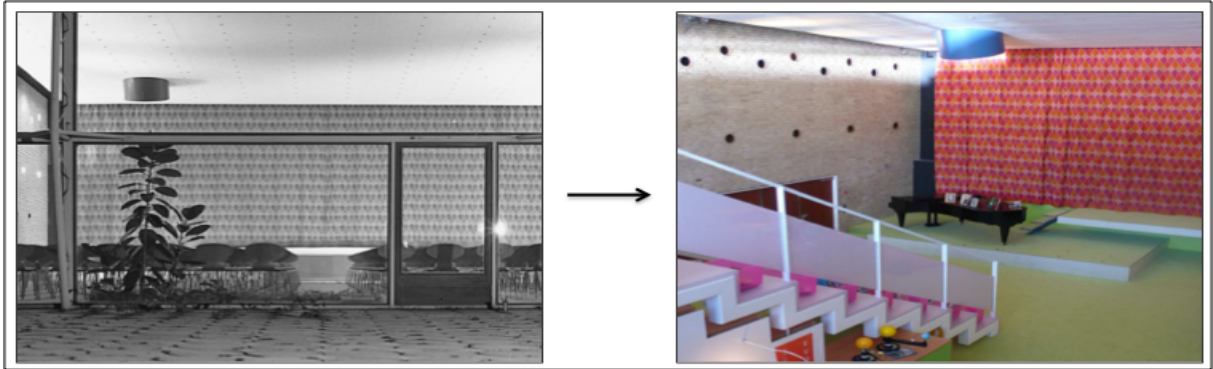
Picture 9. Mimicrying the courtyards



The architects could also reprogram rooms or spaces, without physically transforming their structure – because the CPO requested, *"as long as you can remove the addition it is ok"* –, by giving a new function that helped habits evolve. Again at Munkegård Skole, in the old and disused Assembly hall, the architects designed and added furniture with new materials, preserving the spirit of Arne Jacobsen while using the same colours and

specific motifs and furniture and respecting the original room's function, to convert it into a library (cf. Picture 10).

Picture 10. The Assembly Hall & Furniture



As the Gentofte client explained in detail:

"So the strategy from there was to define how the connection should be between the new extension underground and the existing school. And this original assembly hall is the heart of Arne Jacobsen's school. And here we are sitting on one very large piece of furniture, on the 1st floor almost, furniture that is made with very modern materials. The furniture also has a staircase, which is transformed into a stand when the school gives a pupil's show for instance. Underneath, there are also bookshelves and small areas, which you can transform into lounge-like areas. So this furniture, we called it, for multi-purpose, "Super-Furniture", has a lot of possibilities built into it and at the same time it is reversible: it does not touch the wall, the ceiling, and it is just put on the floor so, in principle, you can take it apart and carry it out and then we have the original room intact again. [...] The strategy was to make things very obvious, I think the lead architect was very inspired by Jacobsen's colour scheme, so she also felt it was naturel to continue this sort of language which exists in the school with these colours all the way through."

Whereas at the École des Mines the configuration of the Schlumberger amphitheatre interior was radically transformed to meet educational demands, while respecting the original shell (cf. Picture 11).

Picture 11. Renovating the Schlumberger Lecture Hall



Another interesting way to integrate “new” into the old was found by actors as they took advantage of the former construction to literally hide new materials and solutions inside the original building. This trick was implemented in case where the aesthetics value was deemed essential, e.g. in Nyboder or in the French Pantheon, where the new materials were concealed into the building’s structure (cf. Picture 12). In Nyboder, they tested a rainwater harvesting system for non-drinking water – for the washing machines or toilets – which they hid in the gutters. In the Pantheon, they put a waterproof tarpaulin under the rebuilt dome to provide more long-term seepage protection. The State architect gave details of this integration:

“Here we had metal hoops that no one can see as they are fully integrated into the stone. We knew their size as we made very complicated models with modern calculation tools. So we knew that the dome takes hold only if the metal does too; but I also told you that there had been a lot of infiltration and we do not fully know material losses in terms of metal, right? So as we planned to restore the dome, I suggested we should take no risk and add additional security. It was achieved with the addition of external hoops that

are covered by lead panels! Initially, I wanted to put carbon fibre in order to maximise the modern legibility of the building ... but I could not reach an agreement [with the French CPO]."

Picture 12. The invisible new materials in French Pantheon



Such an addition was also possible when architects and the client put new materials literally inside the original building. This is why a Wi-Fi installation was allowed as long as it did not damage the original walls, as one Danish BCH architect confirmed:

"some new materials are good, I mean, for example the fact that you have the computer system, the wireless of Wi-Fi: perfect for the listed building ; you do not have to put all these cold lines into the building"

Finally, the last way to adapt "new" was directly related to the building's authenticity frame, which was designed *a posteriori*. In the case of Molitor, where the question of its values led to a lot of public debate, its recognised significance among the French street art movement, alongside its swimming pool function, was respected by the authorised addition of contemporary masterpieces in recognition of the artistic role Molitor played during closing time (cf. Picture 13). As the Molitor's building operator pointed out:

"The first big artistic intervention at Molitor was made during the building works by Futura 2000, nicknamed the "Godfather of Graffiti". When Futura sells a canvas, it is between 20k and 100k euros. We called him and told him the Molitor story, what we wanted to do here, i.e. the ultra- open and creative living space, etc. He just said "Banco!" [...] So he came and left a 25-meter fresco. There is something here that is totally unexpected: it was not swimmers, not the customers but the artists, and their creativity, who came back first. For me, it was really difficult and I find that we pretty much well succeeded: I do not know if you have wandered around but there are artworks everywhere, it sometimes pisses me off when I trip on them ... But it is great: such legitimacy is built and has to be earned!"

Picture 13. The Molitor homage to Street-Art

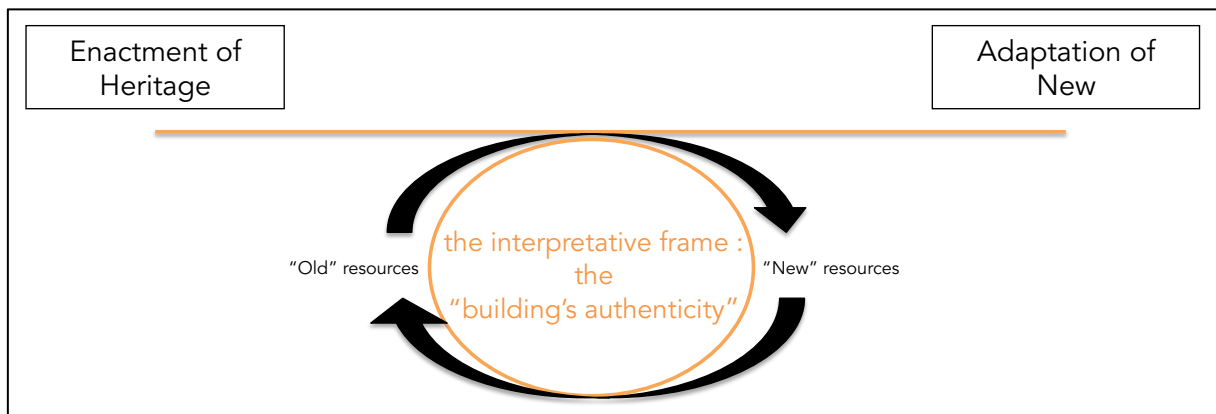


1.2. Testing the solution: a dialogue with the frame

To modernise a listed building, i.e. to modify the current instantiation while still respecting the Listed-Building Institution, actors – and especially the client, the chosen architects and the CPO – interacted with each other and based on the frame they

themselves designed so they could know to what extent they could approach their intervention while either enacting the Heritage or adapting new elements through the intertwining of “old” and “new” material resources at hand. The frame acted as a shared resource at hand to help actors, who submitted building suggestions, to balance such opposing approaches, which they had to materially translate. Their propositions, which were tested and submitted for collective approval, ended most of the time in significant compromises reached to crystallise various opinions and enhance the authenticity frame which was designed collectively and *a posteriori* (cf. Figure 11).

Figure 11. The balance to fit the frame



Tests – and therefore compromises were to be found everywhere in my listed buildings studied – and sometimes were still being debated at the time of the writing. Table 7 introduces to the reader one example per building; examples which differ from the previous ones.

By doing so, the architects complied with the authenticity of the building while developing it. They recorded the building in the current era while respecting the features for which the building was listed. And by extension, the actors maintained the legitimacy of the artifact within the LBI, *i.e.* as its instantiation despite its transformation.

Table 7. Tests and compromises

Affected listed building	What actors tested and discussed	What compromise actors agreed on
Nyboder	As the original buildings were badly insulated, architects, on the demands of both the client and the CPO, had to imagine a completely modern system to enable people to live in the yellow houses.	Two different systems were actually built within the same pilot project to allow a real-time comparison. The decision of the most relevant system regarding the Nyboder patrimonial values had still not been made at the time of writing.
Sølvgade Skole	The client wanted to surround both the old and new buildings with a glazed fence while the CPO architect wanted to preserve the original iron fence.	The glass was allowed only in the empty place left by the original iron gate and the Sølvgade Skole logo was printed into it to report its presence here.
Munkegård Skole	The architect wanted to facilitate people flow within the building which was not easy in the original Arne Jacobsen's building and suggested to put a door between each classroom and its schoolyard.	Both client and CPO agreed to integrate sliding doors inside the original building between each classrooms, but the implementation of the inside/outside doors was dismissed.
French Pantheon	The previous cross, that was put and removed several times during French History, created struggles between actors. Some of them wanted to promote, beyond everything, the Laic character of this French Republic Temple and others beseeched that the Pantheon was first of all a Catholic Church. Opinions on this issue were extremely divergent.	The cross was erected on the lantern while a French flag was set up on the top of the main pediment above the motto "Aux Grands Hommes La Patrie Reconnaissante"
École des Mines	(On-going discussion) One stakeholder wanted to install a green terrace on the top of the Schlumberger Lecture Hall.	(Answers heard during itw) As it was the École des "Mines", it may be accepted as the school would be physically under the green terrace - like the mines were under the ground - or it may be refused as the vegetal environment was not enough familiar with the mineralogic one.
Molitor	The CPO and architects wanted to maintain the original changing rooms while the client asked for their removal to create a gangway instead.	To enable the gangway, the changing rooms were kept but reduced so they could not be used as such anymore; they were just decorative.

2. Selecting the resources

2.1. *A blurred decision-making process*

As I just detailed in the previous chapter and in line with the “building’s authenticity” interpretative frame, the actors had to simultaneously respect the LBI’s protection requirements and respond to the need for modernisation to complete a relevant listed building modification to maintain its instantiatonal character. And to successfully implement this balance, *i.e.* enabling such material compromises that properly translated the frame they designed, the actors had to choose between the “old” and “new” resources they had in their portfolio and shared with each other.

Beyond this collective objective of intervening on the listed building to allow it to continue to function, actors also engaged in an “*intensive process*” of resources selection to answer all the stakeholders’ various and sometimes antagonist requests but also jolts that they wanted or had to implement. This selection, which appeared as a key aspect of achieving such intertwining, therefore implied a lot of discussion and debate between the actors. Indeed, while the client demanded modernity and comfort, the Cultural Public Office and sometimes the patron needed confirmation of the Heritage values of the building, while the architects wanted to respect all the various wishes while at the same time creating their own masterpiece, etc. Within all the listed buildings studied, it was tricky to know which stakeholder made the final call as either the client or the CPO, who represented the authorities that mattered in listed building interventions, claimed such decision-making power,

“The client decides because she/he is the one who pays!”

or

“As a official Heritage representative, when I give my decision, it is a final call”

Architects who glorified themselves as the best source of suggestions also fuelled this confusion. One interviewed architect summed up their mission:

“to help everyone make the best choice as it was [their] job to materially create a unique understanding allowing the building to be used [the way stakeholders wanted it to be used]”.

Generally, and *“because of the anxiety that everybody should be satisfied”*, decision-making appeared very much as a blurred-but-collective action. As a former ICOMOS actor highlighted:

“Decisions are made following a collective unconscious. The shared denominator is that everyone does what they can depending on the others because each actor has her/his own idea of what constitutes the building. [...] So to find such general interest, you compromise on with a lot of things! And that is why decisions have to be collective because a single person cannot make compromises all by her/himself! Even if you want to, it is impossible! You need that everyone ... well all those around the table, to give their point of view. [...] With regard to the listed buildings, this collective decision-making process has always been in place, just like the already distanced look you generally have on it depending on all the possible and different stakes you do not know about!”

De facto, to understand this decision-making process, I therefore needed to focus more on the actors' interactions in terms of how they selected building materials and how they sought to adapt a material artifact while securing the defining features of the institution it instantiates.

Throughout the whole building works project, these interactions relied on a dynamic iteration between all the stakeholders through talks on what materials they were going to use and why. More specifically, they were discussing which resources to draw upon to guide their selection of specific building materials. It appeared that this resources

selection, and how different resources were intertwined with each other, depended on several criteria emerging from the collective context and the social environment. Using these criteria, actors collectively selected resources at hand, which they combined materially and used.

Even though their level of importance differed across the six case studies, six different factors emerged in all of them: they were: *individual preference*, *collective and field alignment*, *economics*, *technical features*, *space* and *time*. They were linked to the different stakeholders' repertoires that took part in the construction works and they represented the borders within which the actors had to interact. Consequently, these criteria both facilitated and constrained collective decision-making. It was essential to specify here that these criteria were interrelated and their relative importance could lead to different outputs: for instance, in Nyboder or in the Pantheon, the more economic resources the organisation had, the more the Heritage was respected. And on the contrary in the Munkegård Skole or in École des Mines, the more influential the collective and field alignment was, the less the Heritage was respected and the more new requirements were integrated. Generally speaking, while they are all linked, it was difficult to clearly separate these six criteria.

2.2. The six selection criteria

2.2.1. The individual preference

This first criterion emphasised the personal feelings of the actors and their cognitive interpretation of the building values. Regarding their own repertoire and past experiences, all the actors had different self-interests and know-how when practising these kinds of works. These different motivations led to actions that might be contradictory or additional regarding the initial competition call for bids, or building proposal, and what actors wanted to implement. Indeed, some actors subjectively predicted what Heritage and modernity should be in the building and tried with varying

degrees of success to impose their personal views by choosing appropriate materials to fit such wishes.

As I heard a lot during my interviews *"Heritage always comes first"*, and some actors paid particular attention to how the "old", with its shape and values, was respected as *"[the architects] have to keep the building as it was"*. Such actors did not really focus on the issue of modernity and did everything to avoid it. The CPO architect of the French Pantheon considered this building *"as maybe not the best example"* to understand the integration of modern elements, because its mission was as follows:

"as a CPO, I manage a listed building that does not have to evolve anymore and to experience transformation ... I just allow leeway when it affects an intervention related to its function."

On the contrary, as the CPO preference was often distorted – as analysed in the study – some individuals insisted on how integrating modern element or ideas, *i.e.* through materials, into old buildings *"makes sense"* as *"identically rebuilding a listed building is dramatic and most of the time impossible"*. For instance, in Sølvgade Skole and regarding the sustainable paradigm, the lead architect did not hesitate to apply for green labels, such as the ISO 14001 certification, even though it was absent and not a pre-requisite in the application. As its architect told me, they created a functionalist façade where they integrated sustainable solutions to regulate energy consumption and airflows:

"because we [she and her team] believe in saving CO2 emission, we wanted to push these green developments and we deliberately outdo current standards on sustainable development. [...] And actually we just went ahead and decided. We did not ask, we just said to the client "this is what our ambition is, we want to have a low-energy building".

In the École des Mines, even though the client had already some *"sticking points"* with the CPO regarding the addition of new materials, he insisted on the school's legitimacy

to enable the integration of the latest innovative materials like the more resistant Ductal® concrete³⁷.

Furthermore, some actors also had different feelings about what they thought the future users would expect and did not hesitate to depart considerably from what had been validated at the beginning of the project by the client, which was the case for Molitor. As the former client explained:

"The winter pool, as it was designed initially for the project, did not allow us to organise events inside. And even though it was a pool, since 1989 the winter pool has been a place mainly dedicated to events as common people remembered it. Initially it was not planned, i.e. the decision had been made after the works started. So we [the client] poached it and we did not ask for opinions of the other stakeholders: we just said "let us go!" The decision was made to say we would build an object that is not in accordance with the permit, and we do not care because it is essential to revive this building. The architects told us "oh that is not possible, the CPO will never approve that." So we said "but we are not asking you what you think, we are asking you to go and explain to them what we are doing, why we will do it here" ... and they approved!"³⁸

The individual preference could also take on a selfish aspect, especially when actors, and mostly the architects wanted to create their own vision of what the "old" should be nowadays. The case of Munkegård was pretty significant as the lead architect had the ambition to improve the overall perception of the building as:

"I hope the old and the new buildings in 15-20 years will be seen as a whole, this is very important! It is like a new listed Munkegård Skole."

³⁷ For more information, cf. <http://www.ductal.com/wps/portal/ductal/HomePage>

³⁸ For example, since Molitor reopened, an exhibition tennis game between Rafael Nadal and Serena Williams, a Nike fitness class, and an Etam lingerie fashion show have been held in the winter pool.

Whereas in Munkegård this aspect was approved as a lot of stakeholders agreed that *"it was the best solution despite the disagreement from Arne Jacobsen's office and the never-ending discussion on its relevance that will follow"*, in Nyboder such individual preference added tensions between the client and the architects, as the project manager expressed:

"our architects only wanted to make a monument of themselves ... yes something like their own masterpiece and we had to pay for that."

2.2.2. The collective and field alignment

Each building project created a short-lived organisation where decisions were made between each group of actors. Despite the fact that they had self-interests that could be contradictory, each of them also had to take into account the wishes of the others, but in some cases it was not a matter of wishes but rather lines the actors had to toe, especially when such a direction to take was dictated by the actor who paid for the project, i.e. the client or the patron. As the Molitor architect underlined:

"Let there be possible negotiations because the stakeholders do not agree with each other: it happens all the time! But if the client says, 'well too bad, we are not paying for that', well they do not pay and things are not implemented and built!"

The same thing happened when the building benefited from high levels of sympathy among the citizens. In Nyboder, *"which remained the most precious unique housing Denmark had"*, in the words of the Danish State architect, *"Heritage should be on the top of the ladder"*. But, based on the desire of common people, and future potential users, for more comfort and modernity, the architects overlooked this patrimonial dimension. Why? Because the influences of the patron who had interests in such a

solution were stronger and the Heritage side could have been minimised despite the displeasure of the CPO, which felt that,

“some new materials put in some rooms are too luxurious for what the building represents and what kind of people [students] live here!”

The role of the CPO architects was restricted to their legitimate judgment in terms of “old”, but *de facto* constituted an effective safeguard regarding what should be respected to maintain the instantiatinal character of the building, which imposed constraints and compromises on other stakeholders, as one French client expressed:

“Within our short-term organisation, I said to the architects “You deal with the Heritage constraints: it is your job to cope with that! If you need to redo a window as before ... your job, not my problem! But it has been a big constraint when I think about all the windows, all the openings ... we had to respect all the proportions: I wish we could open and enlarge everything! We left the Heritage architects significant latitude.”

Regulative concerns were also emerged directly from the field, which the organisation had to deal with, such as norms or rules. For instance, the classroom temperature at Sølvgade or Munkegård had to be monitored, “because it is a health concern” even though it involved adding some automated devices or materials that would change protected elements or reject the reconstruction of old materials, such as the coating used in Molitor, which did not fit standards of well-being for swimming pools.

Environmental pressures such as political concerns were also materially represented, especially in the French Pantheon. There, the actors discussed in depth the interest of rebuilding a golden Dome as it was originally. The allegory of gold as a precious metal and sign of external richness was reported as the subject of intense debate between politicians and citizens at the time of a global economic crisis. Here, while all the stakeholders were unanimous that it should be done, the decision to rebuild the Dome in

a neutral manner came from the French political elites, as was confirmed by one project stakeholder during an interview:

"There were pros and cons. We know the dome was gilded, that is for sure! When the Pantheon became a Republican Temple, it was not golden anymore but from an architectural point of view, it made a lot of sense to redo it. [...] In fact, the opinion of the State Commission, the CNMH, in its cowardice, said "yes the dome was gilded but ... we cannot find gilding in situ" ... But we know there was gilding ... such reasoning cannot be applied but it allows political interference. [...] Here it was really not a matter of price or anything else, it was a matter of principle."

A general trade-off regarding this criterion could be explained with another example taken from the intervention on the French Pantheon where an access for the mobility impaired should be installed in a near future. The State architect explained this:

"We decided to make a hole and put an elevator behind the colonnade, so that everyone can go through the same entry, which is advocated by the regulations on disability. The question that arose was: where do we put it? Do we ultimately favour this or that side? Surprisingly the Commission favoured this side where there was for us a major Heritage issue, because there is Soufflot's Sainte-Geneviève building, while on the other side there is a replica that was made 80 years later. We do not see the difference but on this other side, there is the town hall ... and therefore we faced more political issues because we were surprisingly asked to put the elevator on the side where there was the Heritage challenge."

En aparté, the role of the Protection Societies had to be minimised and it was clear that they had a small impact on decision-making. The best example is the Samaritaine renovation works, where after a legal win of Protection Societies – that led to the building permit rejection – the French Council of State gave its approval to the architects to

transform the original stone façade into a glass “shower curtain” to avoid a Parisian architectural pastiche (De Jarcy, 2015). In Denmark, one Protection Society member recounted how she once went to a construction works meeting and people asked her to leave, as *“they were afraid that I came to put a new landmark and to raise a new case so the school would be preserved for the future”*.

2.2.3. The economics

“Everything is about money” and *“money is always the biggest issue”* were recurrent quotes heard during the interviews because construction works on listed buildings are the more expensive construction works as they are more complicated to implement due to the wide range of constraints involved. As one client explained to me:

“the total amount is maybe three times what it would cost to do another building or modern house of the same size.”

Moreover, it was common for the overall budget to skyrocket in comparison to what was originally planned at the beginning of the project. For instance, while the initial budget for the Nyboder renovation was DKK 25m (€ 3,35m), it ended up costing around DKK 89m (€ 11,9m). But paradoxically, discourses, and hence decisions, were often divergent in relation to actors’ interests vs. the economic concerns.

On the one hand, it was not rare for the client or patron to give as much money as possible to respect the frame on which actors agreed, as *“you cannot decrease the ideal approved project or the Heritage respect because of economic reasons”* and even though some installations were futile and expensive, e.g. the reconstructed Molitor glass window. One Danish CPO architect well described such “old” and “new” frame respect while taking about the choice of materials for Nyboder:

“There will be no discussion at all about the right way of doing things even if it is the most expensive. For example, people needed a new window. Either

they can ask to get one down from the market for DKK 2k or we can call a carpenter who will cost maybe 10k but who will make a perfect example of what was there before. So we tried to explain to them why the first ugly one was not a good solution, as it will be broken in 15 years because of the bad wood and because it did not respect the architectural value ... It will thus be a conflict while if they make the other one, you can be sure that this second one will fit and moreover live one hundred and fifty years!"

However, such money, which was most of the time public funds and thus should be used to improve quality of life and respond to social interests, was sometimes given in an "irresponsible manner", as one Protection Society director explained in detail:

"Let us take the Church of Saint-Sulpice. The exuberance of the price, which constantly increased, quickly questioned the entire cultural Heritage restoration policy of the city of Paris because it inflated – unexpectedly as it was not initially planned – the bulk of the Heritage budgets! When people talk about the state of cultural Heritage for Paris, they said, "Churches are in very poor condition", and the answer heard was "It is true but if you knew how much Saint-Sulpice cost? It always costs more and more and more! I saw some services and deliveries that I found very shocking even for a Heritage pretext. Why do we even remake a connecting door with solid oak panels and mouldings? At one point ... why do we practice such things when all these things basically do not make much sense? Because nobody decides as all these things are decided in the dark because everyone will inspect and agree with each other while they are self-replicating ... and nothing is gonna change any time soon!"

On the other hand, because funding policies was less important than they were 20 or 30 years ago, the client could also urge the architects to respect the approved budget by doing the "most important first and trying to do cheaper on things with short lifespans, such as indoor equipment". To succeed in respecting such a budgetary restriction, a

noted practice was the creation of a budget dedicated exclusively to Heritage enactment, which sometimes encroached upon modern facilities and thus acted more as a constraint and led to compromises, e.g. re-using existing materials despite shaping new ones as before. When such a trade-off was impossible, the actor who refused it had to leave the project, which happened for one architecture firm on one of the Danish school intervention works.

But again, paradoxical economic situations also arose depending on the project. For instance, in the previous quoted project where the client restricted the expenses, the patron provided:

“enough money to overcome any compromise as [its] role was to be ambassador for the Heritage”.

Indeed, most of the time the patron gave extra money only if the Heritage was enacted and the adaptation of new was limited – e.g. the interviewed French patron traded relevant patrimonial works against the addition of more money by calling for donations or through funding tools.

Ironically, it happened that a client provided extra money to the architects to let them buy new materials which respected the Heritage side less that it helped the architect's desire only: e.g. the entire colour scheme of one of the schools where the architect enjoyed working with the colours but did not know if she *“can capitalise and say how much money was spent on doing it”*. Such an *“irrational”* decision was justified on the pretext that the client *“at a given time, invested so much in the historical building dimension that it is not the € 100k we added to transform the building into a more fun and better place that was never going to make a difference: so let us go, let us go!”*

Finally, the economics might also be a reason for intervening, as a listed building cannot live without a viable program with regard to its function. In the Molitor swimming pool, which was rebuilt just as all the stakeholders wanted it to be, even though the Protection Societies disagreed with the new program, the director argued that:

"without the new luxury hotel complex associated with the pool, which allowed the operator to anticipate substantial cash flow, it would have been impossible to renovate and re-open the place."

Beyond the security upgrade, it was the same case with the French Pantheon as the main objective of the intervention was *"to try to make people enter the monument"*, which required payment of an admission fee.

2.2.4. The technical features

In most of the construction works studied, the actors faced technical issues, which were either the main reason that pushed the client to renovate his building, like the moisture that jeopardised the Nyboder neighbourhood, or a *"surprise"* on site that needed to be solved, such as the importance of lead particles in the French Pantheon. Therefore, lot of discussions took place between the actors about the intention that *"whatever the aesthetics, only the technics matter"*. Paradoxically, and even though it notably affected the user's security, this did not reflect most of the cases studied, where the architectural value was essential. Indeed, to re-use the example of the French Pantheon's new disabled elevator, would it not be hidden behind a column and put far away from the view of passers-by? Or why should the security handrail of the Schlumberger Lecture Hall terrace be installed behind the original stone ones? Did architects not built an underground extension at Munkegård? One French curator justified the pre-eminence of materials' technical features over their patrimonial character:

"as they are used by architects as an excuse, or at least a pretext, to legitimate all the new things they want or try to do on the listed building in order to protect it or serve its function. That is the reason why such a position most of the time led to an interesting compromise [regarding the decision of materials selection]."

So simultaneously to the material choice based on what both respected the “old” and the “new”, the actors grounded their decisions on the technical features of such materials and on how the chosen object would cope with the on-going challenges. Regarding the contemporary issue of energy waste, while some issues were impossible to figure out, as it would be “completely silly to heat a church such as the Pantheon”, actors found solutions that besides enabled such intertwining, as one French State architect illustrated:

“as the woodwork remains the most valuable part of old buildings, I always try to find a solution like the double-windows, which are more efficient than the double glazing and do not replace the existing one”

Another example of stakeholders suggesting such material trades-offs to technically improve the listed building was in Nyboder, where, again regarding the energy-consumption issue, the actors tested two different ventilation solutions in two different renovated housing-rows in order to decide at the end of the current project which one would be the best to use – one was more Heritage friendly, the other more “low-energy” consumption friendly.

Other challenges – such as regulative constraints – influenced the kind of materials that were chosen. Still at the École des Mines, in respect of French regulations on corridors circulation and the number of emergency exits, actors decided to integrate folding chairs in the first row and at each edge.

Moreover, it was interesting to observe that some technical issues, which appeared on the spot, were treated directly to maintain the original material: e.g. the stones full of lead were cleaned following an existing and known technical solution that was owned by one of the stakeholders.

Even more unusual – but nevertheless observed – the consideration of technical solutions to treat existing materials led to the selection of “new” resources that was not planned at the beginning of the work, which was the case of the yellow walls at Molitor. As the lead architect explained:

"When we won the competition and when we filed for the initial building permit, the pool was white, because everyone was talking about the "famous white Molitor liner"! And through the stratigraphic research, we scratched each layer of paint after the other and we realised that in many places there was a kind of dirty white, and on more preserved areas we came across this ochre yellow. And from there, we embarked on a literature survey in which we found very precise descriptions that talked about the famous tango yellow. [...] So both the initial and final project remained the same without being the same because the final project is bloody better."

Concerning the new elements and regarding the balance with the Heritage, the building transformation had to be minimal despite the integration of these elements. This was why, for instance, the CPO agreed fully to implement in the listed buildings technically interesting new materials, such as Information and communications technology (ITC), e.g. Wi-Fi as mentioned above, or some indoor ceilings that regulated the acoustics in the École des Mines for instance. Such technology³⁹ reflects a decision based on compromise, as one State architect illustrated:

"Putting a ceiling in a classroom which makes the acoustics bad does absolutely nothing good for the architecture. But because this building has been used as a school forever, it is very important that it can function as a school. So we might say "ok we have to go and compromise" because they have to be able to use this room in a normal way. We will put it in, we will not destroy anything, and we can pull it down if needed."

³⁹ FYI: as several interviewees confirmed, LBI's actors have started to use 3D-printing technology to replace old materials while creating identical new pieces.

2.2.5. The time

Always implicit in a finite project, time was nevertheless omnipresent in varying degrees as *“back and forth between stakeholders happened all the time”*. As this was one of the major considerations for the actors during intervention works – alongside the economics – how the decision was made was closely linked to how the actors apprehended time.

Whereas some actors, such as the Molitor client, waited until the last moment to fully participate in the project and impose their decision, the fear of *“running out of time and the need to keep moving”* pushed for instance the selection of one material over another. In Munkegård Skole, the client decided to put in a mundane window to replace the original one even though it did not respect the Heritage values or the will of the CPO but also had no specific technical features, for example in terms of sustainable development, which could have been appealing regarding the current context. Furthermore, its aspect was not as aesthetically beautiful as expected. As the Gentofte representative told me:

“This glass has been changed. Now it is a two-layered structure with gas in between, where before it was just one layer of glass. We respected the shape but you see there is a black list just at the edge of the glass, so that is a little change. We are into details but it has been discussed a lot and actually that detail the Kulturstyrelsen told us to remove it. The last year and half, the project group was not ... how to call it ... interested in keeping up a good relationship with the Kulturstyrelsen ... so we decided just to ensure the project would be finished at that time, as the main part was designed.”

Time was also dealt with in opposing ways within the same building site, e.g. the pilot project of the Nyboder student campus. The choice of material in this listed building had been rushed due to time constraints. Indeed, by dreading the coming winter, while the actors needed to replace non-reusable old tiles, the patron explained that:

"they do not have the time to get the right tile for the roofing because it took half a year for the new production, so they had to take what they already had in stock. Something like that can be a time factor!"

However, again in Nyboder, actors did not care about delays in the building delivery. Delayed by about 6 months, the client said, *"for certain architects, time is all the time in the world"*. The CPO followed the *"no time pressure"* behaviour of the architects, as:

"[CPO architects] try to make things work as fast as [they] can but if the project is ... if [they] do not find the project good enough, [they] say to people "this project is not good enough, you have to redo the thing" as [they] have to right to stop a project!"

So in parallel to such practices, it was thus possible to stagger building works over time in order to completely respected the frame that had been approved without making too many radical trades-offs. As one French curator expressed:

"To be sure we do the right thing, it is preferable to do it in two years instead of one. We can be flexible because in any case you cannot do everything at once, even for a practical issue ... like having all the people you need at the same time."

But empirically, and despite such a utopian way of making things flexible, the temporality underwent by actors pushed them to anticipate formal decisions. The unchangeable date of the end of the project influenced their choice of materials because it acted as a constraint. Not delivering a building on time could thus have consequences for its function, which could be *de facto* deteriorated and sub-optimal. For instance the Lecture Hall at the École des Mines had to be finished for its 200th anniversary celebration. Consequently, failure to complete building works could be prejudicial because this first intervention was though as a showcase to highlight educational excellence and as a way

to collect more funds to implement forthcoming works. As the French client of the École des Mines argued:

“Without necessarily being linked to money, at some point we make choices because ... well because it would take too much time. If we have to wait six months for a decision to do something [...] we must decide now without taking into account the official one.”

For instance, in the French Pantheon, architects launched the production of the stone materials required before the main stakeholders made the decision to do so, *“otherwise it would have been too late to get the proper product”*.

Finally, the time apprehension can also be seen in the way that actors forecasted the future of the materials and to what extent the chosen material was relevant to answer some issues related to the function for instance; e.g. the sustainable solutions integrated in Sølvgade, the structural reinforcement of the Schlumberger Lecture Hall rooftop to build the proposed hypothetical patio, or the empty places left by the former cloakrooms in Molitor allowing the installation of ephemeral recreational objects such as a French fries foodtruck, etc. One Danish patron highlighted this on-going thinking:

“I think it is very interesting and good to try to integrate new elements. But I am also sceptical: how long will it run properly if those who are going to use the building can actually do so or take the time and knowledge to maintain it the right way?”

2.2.6. The space

While working on an existing listed building, all the stakeholders had to deal with a given, restricted space that was also of course protected. This selection criterion operated on different levels according to how it was exploited by actors.

In the most of the cases studied, where space was a constraint, this pushed the actors to find alternative – but not breakthrough – solutions, and thus to select accordingly the type of materials based on what they had at hand and what they wished to build.

In Munkegård Skole, for instance, because of the inability to reach and modify the original building structure – according to the CPO comments –, and *de facto* because of the limited buildable space, the architects came up with the solution of digging an underground extension. The integration of modern materials was only possible because the modern building was hidden below the original one, as the main architect detailed to me:

“because we were not allowed to do anything at the old existing school, the project was to create an underground space as they have a very big need for modern rooms because all the rooms there were small rooms. And nowadays they are going to work in groups and so on.”

Additionally, the actors often maximised the existing installation space, e.g. in Sølvgade Skole, where they elevated the new building in the corner of the courtyard, which was the only location available within the school’s existing physical boundaries. As the architect confirmed to me:

“Rooooohhh so complicated, you know there was not a lot of space left inside the schoolyard next to the old school and the fragments of small buildings in it.”

Such maximisation was also possible where architects used the existing elements as the foundations of the modified building. It was by following such a practice that the new Molitor was built, as its architect pictured:

“We built it around the existing pool: above and below but on its sides! This is very important: i.e. to dig below, we needed to have something left so we could work with what remained here. So to build above, it was compulsory

that what was below supported us; that is why we considered what could be preserved while fitting the approved program. So there are non-load-bearing elements that have been maintained – and which were held somehow while we dug in the bottom of the hole – except that today, these same posts are still 18 x 18 but carry four floors instead of two.”

But the space limitations can also be seen in a more geographical manner. In the case of the French Pantheon renovation, the architects decided to use modern staples because it was logistically too difficult – and long – to get access to the appropriate iron staples originally used which were made in the United Kingdom and which were wished and sought by both the CPO and the lead architect, who:

“think it would have been totally feasible to make, only if ... [...]. So we used stainless steel because we could not get that kind of steel and sometimes, well ... you need to decide quickly”

In relation to geography, the consideration of the “old” and “new” material balance was different between the State capital and other cities. As one French State architect pointed out:

“Paris, like always, is very different from the rest of France as there are lots of stakeholders involved, so the State architect’s flexibility and autonomy are quite low. The level of decision for a State architect from the city of Bordeaux is very important and in rural areas such as the Dordogne and the Landes, it goes even further! Here it is important that we settle a course and a make an official decision.”

Finally, the surrounding building space could indirectly act as a constraint. Indeed, the smooth running of the building works could depend on the stakeholder’s capacity to optimise the space and enable the building to keep functioning despite the works, cf. the concern of the École des Mines where the intervention, and also the associated practical

facilities for workers, might not encroach on academic research and students teaching. Such phenomena actually played a role in the choice to add new materials, as the intervention was located in a living space where the structural modification had to be as minute as possible. In the Pantheon, the access to the (damaged) materials – which were checked and whose replacement was approved or not – was only possible thanks to a risky scaffolding that filled in all the remaining space, with very little leeway, as its designer explained to me:

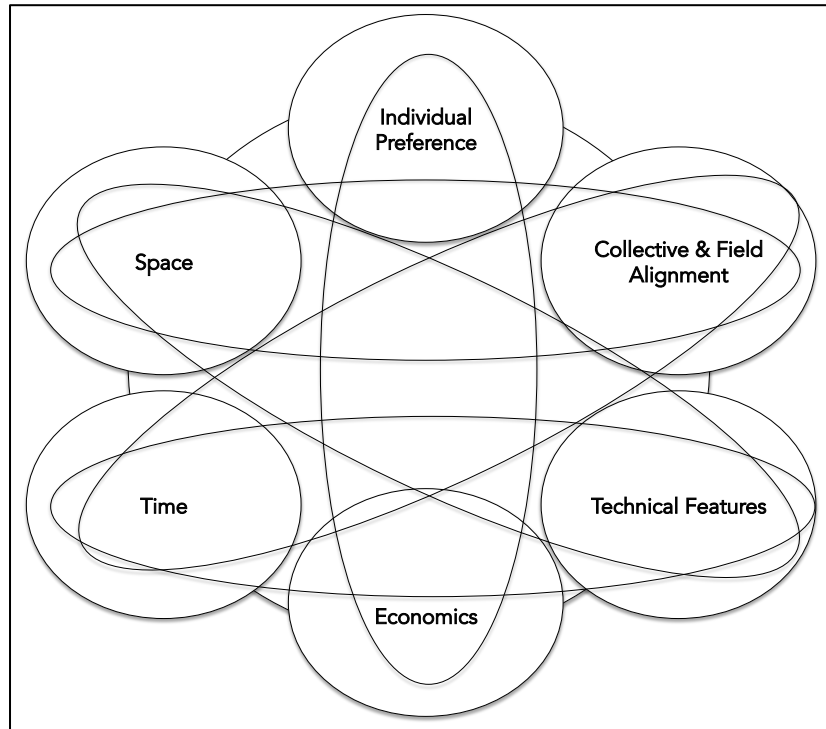
“The space of the building site was a major constraint. Initially, we imagined a simple truck crane to transport materials, and then the idea just popped up to put a crane on scaffolding. And here, I think we took a risk because it is the limit I think of what we can do: but it worked well! The risk is that the pressure, as well as the wind or various other loads, will impact upon the building structure.”

This risk was indeed strongly criticised by Protection Society, which also reproached the stakeholders for subjecting common people *“through the extravaganza of this beast, the enormous cost spent to protect Heritage.”*

2.3. A simultaneous dialogue between actors’ repertoires

To sum up, through the use of the frame as a shared and collective resource to balance the material choice, these six criteria were found in all cases but were treated differently depending on each project and actor. However, not one criterion alone was enough to lead and justify the selection of resources, as all of these criteria the stakeholders had at hand were interrelated (cf. Figure 12). Indeed, because decisions were taken collectively, they emerged from a dialogue between actors’ repertoires according to their own material interpretation of the frame that was highlighted through these selection criteria.

Figure 12. The intertwined selection criteria



Let me take one extended example from each case to depict well this dynamic of compromises.

Nyboder: The patron provided an unlimited budget (*economics*) to respect the CPO's Heritage-related priorities it besides agreed with (*collective alignment*), while the client simply thought (*individual preference*) about modernity in terms of the addition of new materials, providing comfort for the users (*technical features*), put into the existing building (*space*) within a limited construction timeframe regarding the deadline of a pre-planned inaugural party celebrating the end of the neighbour renovation (*time*). This was for instance the reason why the stakeholders, to integrate sustainable solutions into the original building and respect the aesthetical aspect, tested a familiar rainwater harvesting system for non-drinking water purposes – for the washing machines – by hiding it in the gutters which were renewed like the originals.

Sølvgade Skole: Here the stakeholders agreed that it was impossible to touch and modify the original building (*collective alignment*). However, except the space constraint (*space*), the architects benefited from a lot of leeway to implement new elements or personal ideas (*individual preference*) because of the long-term and exclusive contract they had with the client (*time*) and whatever the money it cost (*economics*). For instance, even though it was not reasonable, the price of the creation and the integration of the specific colour scheme was not an issue as the scheme well pictured the forerunning airflow system within the new façade (*technical features*) while facilitating the integration of the building within the historical neighbour – and implicitly the CPO’s “go”.

Munkegård Skole: Architects wanted to create a new toilet-door with an automatic-opening system to avoid pupils bullying (*individual preference and technical features*) in the new toilets, which were previously outside the school, and far away in the courtyard (*space*). Despite the price of the new materials used, and the fees of the architecture firm (*economics*), to find a compromise and make things as quick as possible regarding the school agenda (*time*), the architects used Arne Jacobsen’s wallpaper motif on the door – which was not even present inside the original school – to make a symbolic link between both buildings and make the proposal accepted by the client and the CPO (*collective alignment*).

The French Pantheon: The architects, the CPO and the client wanted to gild the dome of the building as it was originally (*individual preference*). Even though the application of such available material was easy and quick (*time and space*) and the price was only € 200k out of a 20m budget (*economics*), a highly top-down and political opinion stated it was not possible and nobody could argue (*collective alignment*). The dome consequently stayed rough to emphasise a modest French Republic Temple and was redone as before but with new lead sheets to provide modern sanitary advantages (*technical features*).

École des Mines: Despite the client’s desire for modernity to well materialise the innovative image the engineer school has been enjoyed (*individual preference*), and beyond the economical limit, as it was a non-negotiable budget (*economics*) – the various constraints stemming from the fact that the works took place during an open and functioning school (*space and time*) led the architects to find solutions to limit structural

modifications (*technical features*), which moreover fit the CPO's requests not to touch the Vendôme Hotel's façade and make their jobs easier (*collective alignment*). The new structure was thus designed based on the existing one, with the addition of basic iron, which mimicked the previous material used.

Molitor: In spite of the building proposal approved by the CPO and architects (*collective alignment*), the client transformed what was essential (*individual preference*) for the building to be viable (*economics*) and in compliance with regulative pre-requisites for swimming pools (*technical features*) to re-open as fast as possible to match with the opening of the 2014 French Open Roland-Garros (*time*) while more-or-less respecting the patrimonial obligation despite their relative usefulness for the program. For instance, and without worrying if it would be over before or after the opening, the client let the CPO architects redesign the original stained-glass windows even though no user could really see them from the inside (*space*).

At the end, and following the respect of the interpretative frame, it was according to these criteria that actors made or facilitated the decision as to which materials they had to use to achieve their shared purpose, *i.e.* find and materialise the balance between the enactment of Heritage and the adaptation of New. As one architect expressed:

"You have different types of architects. On the one hand, those who designed a thing and said 'I did not derogate my stuff and did everything I could to impose it'. And on the other hand those [from the LBI] who know that the purpose matured, flourished, developed and was enriched through actors' discussions because they pushed us to call our solutions into question all the time. [...] So even though it would be easier to say 'we planned this, we do this', because sometimes we could simply not implement this idea because of this or that, we took that into account to find something else."

And to find this "something else", stakeholders used and shared their resources at hand – *i.e.* "already known elements or ready-made solutions" – by diverting them, because

following such resources put them on the path to knowing what to do depending on the case. As one CPO architect, confirmed to me:

“To accomplish a listed building project, Anglo-Saxons think, “we must do that, it is our ideal, so we are now trying to find everything we need to complete this project as such”. But elsewhere, it is rather another way as people say, “There are all the material resources we have, let us go that way!”

3. Discussion of Chapter 7

As previously outlined, the question of collective bricolage involves the question of resource-sharing mechanisms (Duymedjian & Rüling, 2010) largely overlooked in the bricolage literature, which nowadays mainly focuses on entrepreneurship in digital or creative industries (Rüling & Duymedjian, 2014; De Klerk, 2015) or on managing a resource-scarce environment (Linna, 2013; Smith & Blundel, 2014). The current manuscript therefore introduces a model that highlights such mechanisms while analysing the condition that enables the different types of dialogue actors needed to modify an existing instantiation and how they implemented them to produce an outcome that answers their collective challenge by selecting their overall resources at hand. *De facto*, my main contribution on collective bricolage is to present it like a dynamic based on a two-level dialogue leading to a dual symbolic but also material construction.

3.1. The dialogue’s first level: between the actors and the interpretative frame

3.1.1. To test and balance the outcome

The *a posteriori* and collectively designed frame, or interpretative frame, thus helps actors to modify an instantiation while acting as a landmark to level on-going

discussions between actors so they can know where to stand to respect the institution, *i.e.* what material transformation is possible or not to implement. As I demonstrate in the study, having such a shared resource among the actors leads them to test different types of material translations while submitting the outcome they designed to iterations between the frame and them. This result here follows the findings of Rao et al. (2005), because the evaluation of the outcome is institutionally endogenous and not external. Embedded actors themselves actually judged the symbolic side associated with the materialisation of the frame as it was created and approved by them, as well as the boundaries to respect. Institutional limits, with which actors can play ... so generally does the bricoleur (Weick, 1979; Højgaard Christiansen, 2012).

With the close knowledge they had from their environment and its constituents – one more time because they ground and share the same cognitive interpretation among them – the interaction with a concrete material environment is, if not easier, facilitated as they know what such materials could represent and carry – *e.g.* their meaning or capability. As Weick (1993), Garud and Karnøe (2003) or Baker and Nelson (2005) have already analysed, such intimate knowledge enhances the manipulation of materials as actors all validate an already defined material outcome that could remain confused in its final physical state but nevertheless unique, or innovative – the highlight of the outcome, and thus the values to respect, were in the empirical case formalised in the building proposal. And if such a final state was unknown, it was because actors tested different material solutions to better fit the interpretative frame on which every stakeholders agreed after compromises or consensuses. Indeed, one of the strengths of bricolage is that if a chosen resource does not “fit into the structure [*i.e.* the designed frame], [bricoleurs have] the possibility of putting a different element there instead” (Lévi-Strauss, 1966 quoted in Duymedjian & Rüling, 2010: 138) – the interpretative frame can be associated with Lévi-Strauss’ structure following the definition he provided in *The Savage Mind* (1962/1966).

In the empirical case, actors balanced the intertwining between the “old” and the “new” to symbolically build the instantiation, so the artifact could remain under the scope of the frame. As previously illustrated, the (wrong) integration of one element can move the

artifact outside the designed frame as well as the dismissal of one element instead of another, and therefore remove the instantiational character of the artifact.

Moreover, the empirical case shows that the advantage of having a shared reference enables actors to bypass the negative aspects of the implementation of such trial-error tests regarding the uncertain outcome associated with a collective bricolage practice (Ciborra, 1996). While continuing to dialogue with the frame, which remains the first-level of the dialogue, I see that actors avoided delivering “hybrid, imperfect and transient artifacts” (Lanzara, 1999: 347). The interest of these iterations between the actors and the frame to test their solution relies on the opportunity it gives to the actors to offer at the end a “good enough” solution for all of them (cf. Senyard, Baker, Steffens & Davidsson, 2013). As one French architect told me:

“we cannot really talked about compromises because at the end, everybody won”

In contrast to Miner et al. (2001) or even Baker et al. (2003), I analyse with the case of listed building artifacts that the application of the pre-planned design of the intervention works differs from the observation of its immediate execution as the collective bricolage dynamic I analyse follows a two-level dialogue process where such pre-planned design is firstly submitted for collective approval. Therefore, the curious hybrid of Lanzara and Patriotta (2001: 959), or the “brilliant unforeseen results” (Lévi-Strauss, 1966: 27) are not the results of improvisation but the symbolic materialisation of the effective dialogue between the *a posteriori* frame and the actors.

In regards to the argument of Duymedjian and Rüling of “providing opportunities for learning from trial and error” (2010: 147), because all the cases were different despite a similarity between the actors involved – which was confirmed by many of my interviewees – I also advance the idea that there is here no occasion of lasting learning from trial-error tests through collective bricolage. Or at least, the only routine I can highlight is mostly the initial step of frame design to implement such collective bricolage mechanism. In my cases, I actually record that established solutions do not exist *per se* and actors thus had to be innovative while using their resources at hand (Baker, 2007).

3.1.2. To enhance creativity and innovative solutions (in a limited scope)

To respect the compulsory balance between two antagonist approaches to reach a perfect fit with the frame while dialoguing with it, tests were thus a common behaviour during this collective bricolage process, so actors could offer the best outcome as possible in terms of symbolic integration.

Like Chao (1999) who underlines in the case of the modernisation of Chinese shamanist rituals that such symbolic respect involves the intertwining of discourses, my case proves that such respect can go through the extreme care and integration of relevant materials, in which institutional values are thus conveyed. Besides, I bring another evidence proving that material carriers can reinforce the legitimacy of an institution (Lanzara & Patriotta, 2007). In the empirical study, actors had to play with both “old” and “new” resources to implement contemporary solutions which most of time needed to preserve old features and thus had to reveal themselves as innovative.

Indeed, far from an industrial innovative design regime and their complex associated organisations (Le Masson, Weil & Hatchuel, 2006), I demonstrate in my study that the more bricoleurs tested solutions, the more innovative these solutions could be. Or as Baker and Nelson write, “the process of testing and counteracting limitations also elicits a variety of other behaviours and capacities, such as creativity [...] because it relies heavily on trial and error and tolerance for setbacks and also because it creates situations in which out-of-the-ordinary behavior can result in visible, out-of-the-ordinary results” (2005: 354). Like previous scholars before me (Garud & Karnøe, 2003; Banerjee & Campbell, 2009; Bechky & Okhuysen, 2011), I analyse that actors use the existing forms, knowledge or technologies to imagine creative reconciliation of these various elements or reconstruct them while directing them towards innovative solutions – e.g. the Molitor ceramics or the Nyboder rainwater harvesting system.

Also, I note that because each case was unique – as actors do not have to translate the same frame, which is also different in each case – the solutions implemented were *de facto* unique, too, and consequently made impossible any learning but also, and

paradoxically, any improvisation. Why? Because, as each original “building” artifact was different both symbolically and materially from one another, actors explore the possible solutions based on the frame they designed and play through iteration between their solutions and the frame to balance the symbolic scope in which the artifact should be located.

By highlighting how the frame gives to the overall stakeholders a perfect knowledge of the object, and of what the artifact could physically experiences or not, I confirm and move beyond what Minguet and Osty (2010) argued when discussing to what extent innovation was possible when implementing bricolage through the exploration of what is possible. Indeed, the dialogue with the frame and the exploration through trial-error tests reduce the uncertainty and prevent improvisation. Furthermore, such distance between the exploration of a new solution and the fulfilment of the final and approved action develops creativity and justifies why organisations are more innovative while practising bricolage than others that do not as they evolve in a resource-scarce environment (Penrose, 1959). Following what Agogu   and Boxenbaum (2014) predict, through collective bricolage, the act of giving a new cognitive trajectory to embedded ideas, mirroring the absence of learning, leads to the generation of new solutions while maintaining the frame.

So, while I show that resource constraint can be a strength to enhance actors’ creativity, innovative solutions with collective bricolage remain however incremental (Christensen, 1997). Indeed, they cannot be radical as the number of selected resources, and more precisely the number of solutions, were limited because of the actor’s close instrumental set at the given time of the project – here the time-limited intervention works – which constitutes a bricolage “pillar” as L  vi-Strauss advocates in his seminal book (1962/1966). Along that vein, and to adopt language of the innovative design theory (*ibid*, 2006; Agogu  , Arnoux, Brown & Hooge, 2014), collective bricolage thus appears as a simple innovative design regime as no unknown resource – *i.e.* no knowledge and their associated materials – is added in the design and production of an outcome.

And it is because such innovative capability of collective bricolage suffers from limitations that another level of dialogue is compulsory so the material construction fits the symbolic one and vice-versa; the aim, as I like to repeat to the reader, is to physically modify an

artifact while maintaining its instantiational character. More specifically, this is the reason why such materials selection needs to be carefully grounded in criteria.

3.2. *The dialogue's second level: between the actors' repertoires*

3.2.1. To approve and construct the outcome

In a case of collective bricolage, because the symbolic construction needs to be translated materially in a relevant manner, *i.e.* while respecting the tested and chosen balance that itself respects the frame, such first-level dialogue between the actors and the interpretative frame cannot be very efficient or useful on its own without the existence of a second level of dialogue: the one between actors' repertoires. Indeed, if the interpretative frame sets a shared knowledge around which actors can discuss and compromise – as I demonstrated previously – it is with the help of this simultaneous second-level dialogue that the actors can materially build and modify the artifact while respecting the symbolic elements, which provide and thus maintain its instantiational character. Indeed, this is the level of dialogue that leads to resources selection.

The dialogue between actors and their repertoires remains the most overlooked and unexplored-but-used mode of action in the bricolage literature as it appears as totally taken-for-granted by scholars. And even though no-one really focuses on this type of dialogue, the current thesis proposes to highlight its underlying mechanisms while analysing the conditions that enable the collective sharing of repertoires and thus addresses some scholars' hope to better understand the dialogue process (*cf.* Duymedjian & Rüling, 2010; Meunier, Lambotte & Choukah, 2013; Jaouen, Nakara, Vedel, Gabarret & Dandria, 2015).

The second part of my second contribution is thus focused on the way the different actors collectively selected and implemented material resources. Following Lévi-Strauss' poetry of bricolage – actor talks with and through objects at hand while reflecting the created structure in which they are embedded (1962: 32) – I analyse some dimensions of

how actors materially express and intertwine their decisions, *i.e.* how they initiate the dialogue with their repertoires, which was composed of heterogeneous resources, such as concrete (building) materials but also knowledge, people networks, etc., and how they mobilised it (Feldman & Orlikowski, 2011; *ibid*, 2014).

The importance of this piece of dialogue is to construct the outcome of the chosen relevant solution coming from trial-error tests and in fact approve it while motivating the decision of which resources – here building materials – have to be selected to act on the artifact. My case study provides empirical evidence of a posthumanist stance that neo-institutionalists have called for (Roosth & Silbe, 2009; Carlile et al., 2013). With the two-level dialogue, I actually observe how actors intertwine both symbolic and material dimensions and how, by interacting with materials, actors are able to interpret symbolic elements.

This level of dialogue is indeed interesting to focus on in relation to the materiality question that is raised within the neo-institutional literature (Boxenbaum, Huault & Leca, in press). These last findings show that a relevant dialogue between actors and their repertoires is essential to implement consistent resource selection that echoes the institutional legitimacy despite the material transformation, as the main difference between a usual artifact and an instantiation remains the institutional elements conveyed by the latter (Hilpinen, 2011). Alongside academic considerations emphasising that an instantiation conveys and materialises institutional logics or practices (Suchmann, 2003; Zilber, 2011; Friedland, 2013), this research suggests that the act of instantiating an institutional frame facilitates the understanding of the institutional legitimacy as actors are involved in both symbolic and material constructions. In the case of modifying an instantiation, collective bricolage thus makes it possible to blend them together, as the symbolic construction is translated through the obvious material selection (Olsen, 2013; Jones & Massa, 2013; Jones et al., 2013) via, as I have highlighted, the help of the two-level dialogue. Indeed, if the two-level dialogue leads to calibrate the symbolic and material construction of the instantiation, *i.e.* of the artifact in relation to the institution, the latter is possible through a decision-making process allowing for the dynamic of collective bricolage.

Using the interpretative frame as a structured guideline, actors collectively choose the relevant resources that will change the instantiation of an institution by means of a number of criteria “at hand”, *i.e.* existing within the collective and its reachable environment, between which they made trade-offs and which may differ according to the situation and actors involved. In that case, actors know how to dialogue with their repertoires thanks to how others actors dialogue with their own regarding all actors interactions and how they take into account the six selection criteria proposed herein. Such criteria help actors to understand what others want to do and which resources they wish to use to respect the purpose they share.

3.2.2. A quest of consensus to select resources: the six selection criteria

The question of materials selection, which thus happens simultaneously with the symbolic construction and completes the instantiation modification, is essential, as actors need to relevantly select their resources at hand to achieve the approved balance. Indeed, the selection, and therefore the integration of an unusual material, which cannot convey a protected and chosen value, can break the instantiational feature of the carrier, which will be consequently considered as a simple artifact in which it is impossible for actors to translate the chosen institutional elements, *i.e.* the frame they designed.

In the findings, I underline that to both approve and achieve such a solution coming from a trial-error test, the actors reach compromises around which materials they will use. And the understanding of how compromises are made is interesting as it underlines how actors dialogue with their own repertoires and with each other's. While analysing how these numerous actors are able to select the pertinent resources at hand to fulfil their collective aim, the thesis offers thus an answer to scholars' requests based on how such dialogue between all bricoleurs' repertoires is possible in the case of collective bricolage (Duymedjian & Rüling, 2010). The second part of the contribution on dialogue is focused on the way the different actors collectively selected and implemented material resources. Alongside Innes and Booher who point out the appeal of simulating solutions to pick that which everyone can agree on (1999), I analyse here some dimensions of how actors reach

consensus on decisions via bricolage while highlighting six selection criteria around which the decision-making process is based and the dialogue between the actors and their resources at hand is motivated.

The six selection criteria are: individual preference, collective and field alignment economics, technical features, time and space. However, and again, even though I show that they are interrelated and can be both facilitators and constraints, as every criteria is coming from one actor's idea or requirement submitted to the collective, I restrain my study to the illumination of all the criteria always present in each case because within such a collaborative process it appears that prioritising one criterion over one another is barely possible. The main reason is the difference between the frame and its associated considerations regarding the balance between the "old" and the "new" needed to maintain the institutional legitimacy of the carrier.

To go beyond the momentum or accumulation of ideas, propositions or resources put on the table by the different stakeholders (Hughes, 1983), they themselves have to filter them and trade-off on which one they will use in order to construct the needed outcome. The criteria thus enable the dialogue between actor's repertoires and lead to decision-making especially in such a situation where no actor really has the power to make the final call without taking care and account of everybody's opinions and wishes as part of the most optimal solution possible.

The study highlights that the selection of resources is made following an intensive process of iterations actors practice between each other around these six criteria and in relation to the interpretative frame which acts as a point of reference to know to what extent they can discuss the blending of material resources while coupling them with their associated values. Even though Lévi-Strauss in his seminal book (1962/1966) already writes about the existence of criteria that could influence the choice of the resources at hand and how such dialogue is implemented – for instance the consideration of technical means (1962: 33) or economic concerns (1962: 37) – in this study, I move beyond what he and others scholars after him discovered.

What I label *individual preference* basically echoes the bricoleur's intention "to put a little piece of [her]self" into the outcome (*ibid*, 1962: 35). While this personal motivation constitutes the main reason underpinning the dialogue and the key feature of the single

bricoleur, who easily decides what resources she wants to use as she is the only judge of what she does following her own knowledge, this criterion remains the main issue to resolve in case of a collective bricolage situation as it forces a confrontation between several subjective decisions with regards to the appropriate resource selection – as Duymedjian and Rüling anticipated (2010). *De facto*, because it primarily leads to compromises among bricoleurs, I suggest the presence of a second criterion named the *collective and field alignment*, which guides both the role-playing game and the decisions because it impacts upon the iterations between actors and all their repertoires as other principles, such as new institutional requirements which overstep the actors involved, have to be taken into account.

My analysis also offers a new perspective on the *economics* criterion. Indeed, while it is introduced by most of the scholars as the reason that motivates the use of available resources to bypass the various environmental scarcities (*cf.* Baker et al., 2003; Di Domenico et al., 2010; Desa, 2012; Perkmann & Spicer, 2014), I show paradoxical considerations of this criterion as the question of cost could be minimised and curtailed in relation to respecting the frame and the intertwining with other criteria. However, this criterion remains an important part of the discussion among actors. In parallel, the same assessment can be made on the *time* and *space* criteria, which are also implicitly quoted in Lévi-Strauss' book (*cf.* Duymedjian & Rüling, 2010: 136), as the study shows, while emphasising their different dimensions, the extent to which such criterion can drive the different trades-offs and finally the decision.

Regarding the *technical features* criterion, and while walking the same line as Lévi-Strauss, I have tried with the study to exhibit how negotiations around it can help actors to balance and modify the outcome while confronting and playing with the overall stocks to offer innovative solutions nevertheless institutionally embedded and limited by the frame. I therefore solidify the innovative aspect of bricolage explained by Ciborra (2002) while transposing it to a case of collective bricolage thanks to the interpretative frame integration.

While my study highlights and illustrates what facilitates or constraints resource selection, it is the collective bricolage decision-making process based on compromises between actors around these six selection criteria that has to be discussed.

3.2.3. A decision-making process close to a Garbage-Can model

To succeed in materially balancing the opposing approaches and constructing an outcome approved by all the stakeholders, the dissertation underlines a blurred decision-making process with the help of examples of numerous chosen solutions coming from arguments or discussions between actors.

In such an institutional field, before a final call is taken, the study shows how the ultimate decision remains the result of on-going debates and iterations among actors according to the previously introduced six selection criteria and hence in respect of the resources at hand they have. Beyond the sharing of all their repertoires, actors confront each other's repertoires, as they are all sources of suggestions while trying to push forward their ideas following how they subjectively interpret the material translation (Lukes, 1974). Or put differently, how they imagine how the shared frame should or could materially be.

Consequently, because of the compulsory modification of a unique artifact, the production of a tangible solution by means of the selection of adequate resources at hand, and more specifically, the decision-making process, that led to the construction of such an end and implemented through a collective bricolage mechanism, seems close to the *Garbage Can* model introduced during the seventies by M.D. Cohen, J.G. March and J.P. Olsen (1972).

Grounded on the idea that the decision reached through the interactions between actors is unpredictable – or “unclear” to adopt a bricolage language (Duymedjian & Rüling, 2010: 139) – the garbage can model underlines the ambiguity of reality and questions the link between problems and solutions and to what extent the decision outcome remains the premise of the decision-making and hence the best way to understand how it is constructed (March & Olsen, 1986).

In the six studied cases, the decisions relative to the choice of materials to respect the shared frame do not always appear as optimal solutions, as they come from trade-offs between actors in response to a multitude of issues and resources at hand that could or could not be taken into account by decision-makers. In the study, such concerns are

depicted using what I name “the selection criteria” as they illustrate the overall principles the stakeholders have to consider to be able to collectively construct an outcome. *De facto*, I suggest that the garbage can model can be an interesting model to couple with collective bricolage in order to enhance the understanding of its decision-making process, because all the ideas to succeed in achieving the aim may or may not have consequences on the outcome production as it is previously cognitively defined through the frame. More specifically, I confirm that it thus acts as a starting-point in the process of choices, as Kreiner argues (2012).

Indeed, even despite the apparently improvised pooling of all the propositions and their associated resources, one solution, most of the time a compromise between all the suggestions was always found, proving that an “organized anarchy” (*ibid*, 1972: 16) takes place behind the two-level dialogue and all the iterations.

By using the garbage can model and its main principles, my dissertation offers a brand new perspective of the collective bricolage decision-making process as a complex interactive system. At least, it enables a better understanding of how a unique decision is made when collective bricolage is implemented. It furthermore complements what Innes and Booher (1999) argue when they assume that collective bricolage relies on a method of collective reasoning elaborated on a communication paradigm through which consensuses are found among participants. In the same vein, the study provides a clue to resolve the challenge underlined by Innes in 1995 in which she wonders how the implementation of such efficient collective and collaborative process in order to develop new and creative possibilities is possible within a defined and established institution.

In parallel, regarding the chosen architectural empirical context, the study highlights a continuance of Kristian Kreiner’s work (2012) while analysing that the garbage can model is also present during all the steps of a building work and not only during the competition.

CONCLUSION

In the conclusion, I sum up the previous findings and discuss the instantiation construction process while underlining the two main theoretical contributions of the dissertation associated with neo-institutional and bricolage literatures. I also suggest research directions in regards (or not) to current limitations and offer to practitioners some tracks to follow.

1. The main contribution of the instantiation construction process

1.1. Overview of the main findings

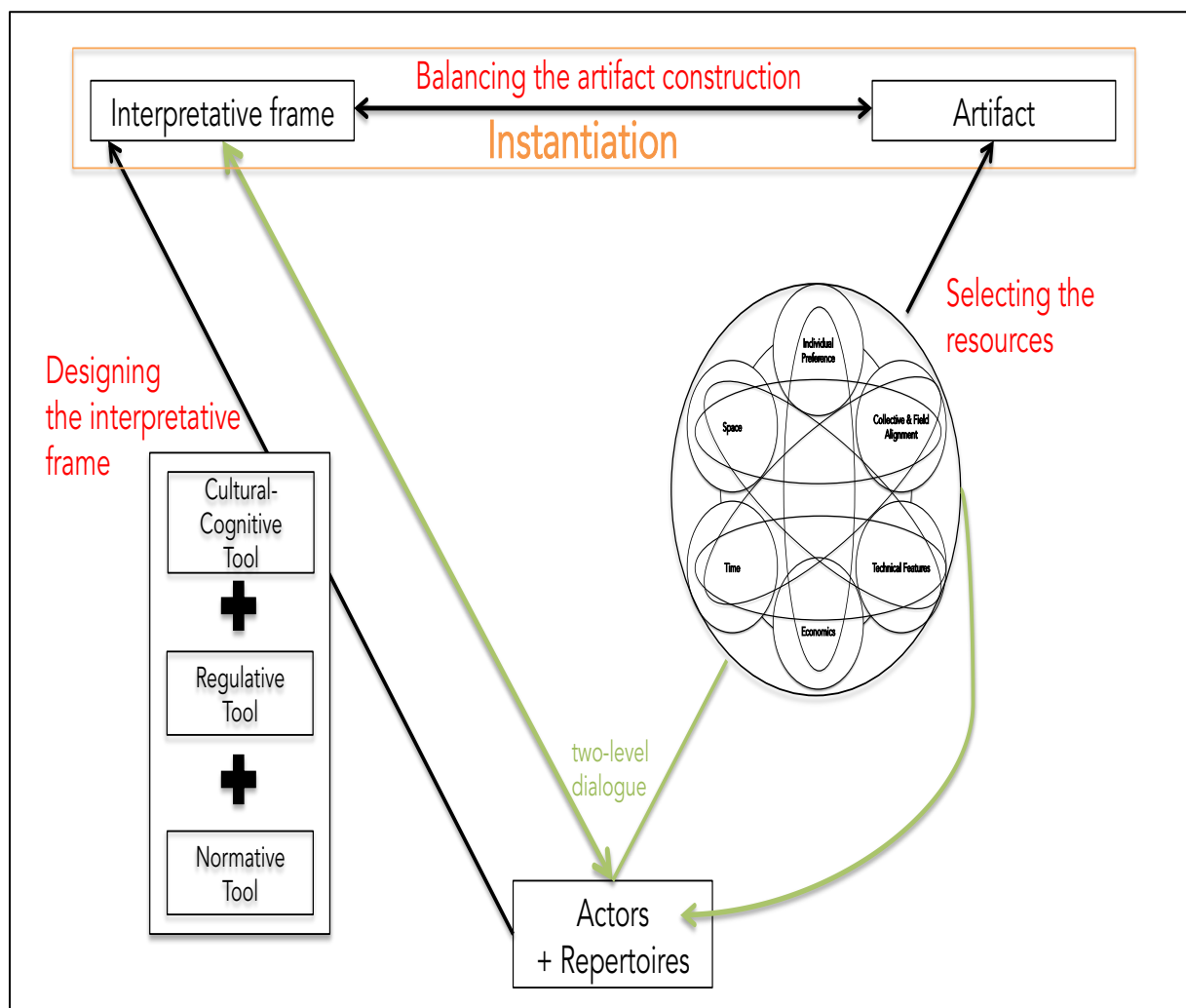
The aim of the dissertation was to understand, from the actors' perspectives, how they modify an instantiation of an established institution. Put differently, I looked into how actors both imagined and built a new instantiation, based on the existing one. More specifically, I studied how the actors conveyed the institutional elements within the new carrier – *i.e.* instantiation – they built, when they were building it. I divided my analysis of this collective action into a two-step construction process, involving a symbolic and a material component; both are part of a collective bricolage dynamic. The first step (*cf.* Chapter 6) elaborated on a condition *sine qua non* that enables the second step (*cf.* Chapter 7). During this entire process, the actors worked on the existing artifact, using exclusively the different types of resources that they had at hand or/and that they already knew would help to resolve such a challenge of material carrier modification, *i.e.* modifying the previous instantiation. The resources included institutional tools, values, materials, etc.

In the first step, I focused on how actors symbolically interpreted and designed the institutional interpretative frame that they needed to respect in order to transform the artifact in such a way as to respond to both institutional and actors' requirements. The creation of the interpretative frame was based on the three institutional pillars – cultural-cognitive, regulative and normative. I emphasised in my study the link that exists between the institution and its instantiation and the elements that actors considered to ensure that the artifact reflects the established institution – the Listed-Buildings Institution – even after various jolts.

In a second step, I analysed how actors translated the interpretative frame while materially modifying the artifact, *i.e.* the instantiation, that conveyed, and that should keep conveying, the institution. As I showed, they used this frame as a shared resource to situate and guide their actions.

To assess which materials they had and which ones they wanted to use, actors simultaneously implemented a two-level dialogue. First, they used the interpretative frame they designed to test which material solutions would establish a good balance between the “old” and “new” material resources that actors proposed to use. Second, they made decisions among all their repertoires by means of six selection criteria: individual preference, collective and field alignment, economics, technical features, time and space. These criteria enabled actors to collectively select their material resources at hand that they needed to materialise the relevant balance between old and new material resources. By extension, the frame they designed helped them to respect and anchor the instantiational character of the modified artifact.

Figure 13. The instantiation construction process: a process of collective bricolage



This instantiation construction process conveys my proposal for how an instantiation keeps carrying the institution that defines it, despite the modification of the instantiation. This process allows me to bring an original perspective to the concept of collective bricolage, one can be interpreted as a model of how actors engage in collective decision-making after they engage in a dialogue with both the interpretative frame they symbolically designed and each other's repertoires. Their interest is to translate this frame into the existing instantiation through actions on materials, *i.e.* to construct/modify a new instantiation of the same institution.

De facto, my first contribution is to the neo-institutional literature with a focus on "interpretative frame". I also contribute to the bricolage literature with an enhanced understanding of collective bricolage implementation in practice as well as its relationship to legitimacy in organisation (studies). I do so by proposing that:

- 1) actors need to design a shared frame to enable collective bricolage,
- 2) which is an structured activity based on a two-level dialogue mechanism involving the following components:
 - every outcome is balanced and tested regarding this shared interpretative frame,
 - and more specifically, the resources selection is based on the intertwining of six criteria that render explicit a messy-but-hidden decision-making process.

1.2. A first theoretical contribution: bridging Scandinavian Institutionalism and Bricolage through the interpretative frame design: the preliminary step of collective bricolage

The single bricoleur acts by means of the mythical knowledge she created from within the close surrounding environment in which she is embedded (Boxenbaum & Rouleau, 2011). Similarly, my study shows that multiple actors also need to symbolically create a shared knowledge among them – or *structure* as Lévi-Strauss named it (1962/1966) – to collectively implement bricolage. Indeed, the single bricoleur can just

think about the outcome, and about the resources she has to use to achieve it, just like she can cognitively interpret and appropriate her surrounding world all by herself (Jodelet, 1989). In contrast, a collective of bricoleurs has to base its compromises and finally make decisions on what resources to use around a shared interpretative frame that enables this collective to take action. The interest for such a group to symbolically build a single reality relies on the unification of the individual perceptions of the same social world; such a similarity stabilises their perceptions and enables transmission within the collective (Moscovici, 1989). Besides, such a frame acts as a lever to collective action as actors share a collective knowledge that consequently “programs” the group behaviour (Weber, 1968).

In bricolage, understood as an ideal-type regime of action, such practice could be stabilised around the fact that it reflects the worldviews that dictate and support the appropriate practice, etc. (Nisbett, 2003 quoted in Duymedjian & Rüling, 2010: 139). The worldviews – or the *metaphysics* in Duymedjian and Rüling (2010) – include both the symbolic and material values that structure actors’ world as well as interactions (*ibid*, 2010: 141). In fact, collective bricolage cannot be conceptualised outside the symbolic-material context that gives meaning to it. Cognition is situated in as much as it enabled action (Duymedjian, 2010).

The presence of this dual symbolic-material context motivates my mobilisation of a Scandinavian institutionalism (SCI) perspective. This perspective helps to explain why a collective bricolage process is interesting in a neo-institutional study such as mine. The instantiation construction process reflects a shared interpretation of the institution. The symbolic construction of the interpretative frame has to be similar or isomorphic among actors in order for them to translate the institution materially into the artifact that conveys it (Czarniawska & Sevón, 1996). Also, a Scandinavian institutionalist focus is especially useful, if not essential, because it makes explicit how a practice could emerge from a social order (Sahlin & Wedlin, 2008) and how actors apply it in a micro-scale (Boxenbaum & Strandgaard Pedersen, 2009).

Indeed, SCI emphasises how a cognitive frame could be shaped within an institutional context and within a same community of practice. This cognitive frame constitutes a pre-requisite for bricolage (Baker & Nelson, 2005), in as much as having a shared

interpretation of metaphysics leads to the implementation of such a process while facilitating collaboration and dialogues among actors' repertoires. When a collective group shares the same knowledge of metaphysics, this frame earns the status of resource, or *interpretative resource*, as it belongs to all actors' stocks and is used as such. Through my empirical study, I gave one demonstration of the fact that collective bricolage, as Duymedjian and Rüling (2010) expect, cannot be implemented in a vacuum; the bricoleurs need both a worldview and to share their repertoires in order to engage a practice of dialogue.

In my empirical case, an institutional carrier had to be modified, but it was *de facto* the institution that actors needed to define, in as much as they were embedded in it and had to anchor its legitimacy through the instantiation transformation. This finding consequently underlines and assures the role of materiality as an institutional purpose (Colombero, 2014; 2015). To think out of the "iron cage", while at the same time staying in it in order to play with the existing constraints, as bricolage allows actors to do (Cartel, 2013), I demonstrate that actors first need to re-interpret the current institutional elements, *i.e.* define *a posteriori* what is taken-for-granted and legitimated within the institution. To do so, the actors used the three pillars as tools, to make significant some institutional limits they have to respect and what features to preserve in the future according to the constructed frame.

According to my empirical context, I show that the frame "building's authenticity" – on which the LBI relies – varies depending on the different buildings. I observe that some values were more important to respect than others during intervention works. This finding therefore confirms the relevance of SCI while highlighting the role actors have in both the definition and diffusion of a same interpretative frame that could lead to some variations in the material outcome (Suárez & Bromley, forthcoming). Actors thus stabilise and strengthen the institution while also changing the institutional frame and its application to a specific case, which respects the enhanced paradoxical paradigm of SCI that stability needs change (Czarniawska, 2008).

1.3. *A second theoretical contribution: collective bricolage as a structured process is not improvisation*

My second theoretical contribution focuses on collective bricolage and more specifically on the dialogue mechanism, which until now suffered from a lack of consideration. Part of the reason for this neglect may be that scholars take Lévi-Strauss' explanation for granted (1962/1966) and never question or discuss it. More interestingly, yet, the term "dialogue" itself, despite its essential role in bricolage process, often does not even appear in the most quoted recent papers on bricolage whatever the chosen approach, e.g. in Baker and Nelson (2005), Rao et al. (2005), Desa (2012), Højgaard Christensen and Lounsbury (2013) and Smith and Blundel (2014).

Duymedjian and Rüling requested that scholars engage in future research on the bricolage dynamics as an operational mode (2010: 148-149). In response to this call, I discovered and analysed a simultaneous two-level dialogue between actors and their collectively created interpretative frame and among actors' repertoires via six selection criteria. Through these findings, the dissertation provides a deeper understanding of how actors are collectively able to select resources at hand in their quest to produce a unique and joint outcome, which is here symbolically and materially built.

Beyond these new elements, which enable a better comprehension of the collective bricolage process and its outcomes, I also extend Perkmann and Spicer argument (2014). More precisely, I demonstrate that such a collective bricolage practice is not ruled by an improvisation regime in as much as the outcome may also be the result of iterations between actors, their resources at hand, and their collectively developed interpretative frame. Or put differently, collective bricolage can be the result of a structured process where the conception of the outcome is clearly separated from its production. Indeed, in my empirical context, the materialisation of the artifact, *i.e.* the construction works leading to the modification of the listed building, resulted from consensuses among actors on proposals or ideas that they suggested and submitted to discursive-but-implicating-materials trial-error tests that aimed at ensuring that the new building, or adaptation of an old one, would keep conveying the institutional elements needed to preserve its instantiational character.

Along that vein, the analysis also shows that the decision-making process involving collective bricolage is divided among all the actors and stands far from strong rational judgments while nevertheless rests on the basis of the intertwined endogenous selection criteria. The impossibility of prioritising *a priori* the six selection criteria *de facto* indicates that collective bricolage is based on a blurred decision-making process where compromises steer the final call. This argument moreover strengthens the point that bricolage does not follow a linear and quick decision-making approach (Stinchfield, Nelson & Wood, 2013), and supports that collective bricolage is not necessarily an improvised activity. More precisely, I found that the last decision was not improvised when actors are all accustomed to implement such a bricolage practice and to deal with such a situation where they need to “create order within chaos” (Weick, 2001: 165) in order to deliver a relevant artifact. This was the case in study with the construction of an appropriated building in relation to the interpretative frame “building’s authenticity” and the aim to respect the listed building’s protection and its associated requirements. Indeed, through the creation of an interpretative frame and the condition *sine qua non* it represents to enable collective bricolage in as much as it acts as a shared cognitive and symbolic resource among actors, the study confirms that actors are well aware of the extent in which they can unfold their material project and deploy and use their resources at hand in various innovative ways (Jones, McPherson & Jayawarna, 2014).

Moreover, the studied actors already knew what will happen and what would be the big highlights and issues to handle, e.g. the compulsory compromises. The reason for their knowing was that the process was driven by a dedicated and mundane type of construction works’ organisation. My study provides here an interesting example of Duymedjian and Rüling’s proposal that implementing bricolage cannot be improvised (2010: 148).

Regarding the fact that collective bricolage does not imply improvisation, the present dissertation breaks with the vision of bricolage as a collective, lasting learning process. Indeed, I postulate that lasting learning is difficult through collective bricolage because actors do not create a share and unique repertoire with all their resources. Part of the reason is that they cannot deliberately pick a resource coming from another actor’s repertoire without consent. In contrast to Garud and Karnøe’s study, where all prototypes

were created through the multiple pooling of resources at hand actors acquired from each others through previous trial-error tests (2003); in my empirical context, such a re-use of other actor's resource was impossible as each project was sole, ephemeral and ended after the first – and last – materialisation. By extension, my study extends Duymedjian and Rüling's argument (2010) while advancing that the exchange of resources and their appropriation by actors is unlikely in such a short-term project, because the input of resources for a collective outcome does not have any consequences on the personal stock. Indeed, actors cannot fully and permanently integrate them in regards to the diversity of projects they are confronted to and because of the dedicated *a posteriori* interpretative frame that is unique to each project.

2. Limits and further research perspectives

The current dissertation is subject to two main limitations, the considerations of which may consequently involve further research perspectives.

The first limitations pertains to the methodological difficulty of following on-going listed building intervention works, and gaining access to the actors while they were engaged in the instantiation construction process. This difficulty implies some limitations in terms of studying collective bricolage processes in greater depth. A deeper analysis of how actors blend institutional constituents while constructing the interpretative frame may be missing. Similarly, an extended study of the two-level dialogue process and thorough work on the selection criteria could provide more insight into collective bricolage processes during instantiation. To better appreciate these phenomena, a solution could be to practice a research-intervention approach (David, 2012; Aggeri, forthcoming); e.g. by being included in a construction work team as a fully contributing member. Doing so could enable the implementation of more formal and informal iterations with other members.

The second limitation pertains to the double case study design. The relationship of the LBI in respectively Denmark and France may also be strengthened. I am fully aware that an acknowledgment that they are similar in terms of Heritage protection and preservation

is insufficient to compare the two empirical settings. Such a comparative study was indeed planned until I discovered that the sustainable development ideas, which is stronger in Denmark than in France, was not as important for listed buildings as I imagined before I entered the field and no meaningful difference popped-up. A way forward in future research may be to go beyond the comparison of their national Heritage legislation and focus on the different Heritage policies present at the cities level, *i.e.* differences in municipal policies between Copenhagen and Paris.

To extend the present study, I can also suggest other research perspectives not associated with the previous limitations.

Regarding the instantiation construction process, the first one is obviously to call for comparison with other fields. Essentially, it is unclear to what extent my findings apply beyond the field I studied. A future study of how the findings translate into other settings could lead to a formal and more robust theorisation of the grounded theory that I advanced in the dissertation. One option could be to focus on other cultural industries, such as the Museum sector where new digital tools for visitors change established practices related to interpretative mediation (Vilatte, 2007).

Another option could be to study an empirical field where the actors actively try to change or disrupt the established institution. An obvious research suggestion would be to find a case where actors modify an instantiation to the extent of provoking a change to the institution; such actions, if deliberate, would qualify as *institutional work* (Lawrence & Suddaby, 2006; Lawrence, Leca & Zilber, 2013). *De facto*, the medical field could be an interesting field for this type of inquiry. One avenue could be to analyse the creation of the Pasteur Institute, which was developed to answer the increasing population demand for rabies vaccination – a cure designed by intertwining existing medical solutions. Extending my current study, this case could provide an interesting example of bricolage that occurs in a context of institutional disruption or/and creation (Colombero, Kokshagina & Cartel, 2015).

Finally, an interesting perspective to consider – one that I expect to tackle right after my graduation – is the exploration of the association between Bricolage and the Gestalt Theory (Köhler, 1929), as this cognitive-psychological literature also focuses on the gradual trial-error dynamic in which actors engage as they seek to solve a problem. Its

leitmotiv “the overall shape overhangs the details”, recalls the architectural principle that only the whole architecture and shape of a building matter in terms of perception and experience of Heritage, even though architects change minute details by adding new materials or elements. Gestalt Theory could thus provide fertile grounds for investigating the symbolism of materials from another theoretical vantage point than the one I adopted in the dissertation.

3. Relevance for practitioners

Regarding the Listed-Buildings Institution, when our successors will want to improve the leftover building’s Heritage, they likely will do exactly what the actors in my study did, namely shape a new authenticity for the building that reflects its institutional context while pursuing a balance between what should be respected and what could be changed in the listed building. They are likely to select the relevant material resources to modify the artifact while respecting the legitimacy of the Listed-Buildings Institution, and to do engage in a collective bricolage process that involves the construction of an interpretative frame and a decision-making process governed by trial-error tests and the six selection criteria that I identified.

The dissertation can certainly stimulate reflexivity among actors involved in the Listed-Buildings Institution (LBI) regarding their practices. In addition, I think it can soften the pejorative connotations, or at least the insecure image of bricolage, among the larger public and organisational scholars alike.

Current societal concerns also resonate with the dissertation in terms of empirical contribution and especially in terms of how project stakeholders as well as common people could think about Heritage interventions through the collective bricolage process detailed in the manuscript.

For instance, on August 17th 2015, the French State launched and approved the set up of a luxurious Hotel into some aisles of the state-owned Château de Versailles, a French listed building with worldwide reputation. The building sections in question, formerly used as offices for the French Defense, have been abandoned since 2008. As explained

Jean-Jacques Aillagon, ex-President of the Versailles estate explained, the invoked reason for this approval was:

“to find a way to value such buildings by assigning to them a useful and economically viable uses, which is a good thing [in as much as] an unused Heritage is a Heritage that is dying!”

Consequently, in 2025, Château de Versailles will experience intervention works similar to those of both Nyboder – in terms of national prestige – and Molitor, when it will be transformed according to a hotel program. At the time of writing, the company AccordHotels constitutes the lead project candidate; this international group is the same group that manages both the construction and the operations of the Molitor swimming pool. In the first call for tenders, a clause has been dedicated to the Heritage preservation (Rédaction de France Info, 2015) which says, “the project group, that wins the tender must spend between 4 and 7 million euros to renovate the roofs, in addition to 4 million euros to be spent on indoor layout. The architects from the dedicated Cultural Public Office (CPO) will supervise all the works”. However, as soon as the project was publicly released, controversies began; Arnaud Upinsky, President of the Protection Society for Versailles, expressed the view that, “such a national Heritage should not be passed on to the private domain under the simple pretext of making money”⁴⁰.

The thesis could thus be used to facilitate the larger public’s understanding, and potential acceptance, of such initiatives and also to make easier compromises that should be made between the client, the architects and the CPO in terms of Heritage preservation vs. the respect of new building proposal. For this case, stakeholders could argue, using the dissertation findings, that the *raison-d’être* of Versailles was to welcome the Royalty and only very rich happy-few.

Beyond this patrimonial issue, closely linked with and exaggerated in the current economical context, the dissertation can help to anticipate the challenge of one part of the current theological struggle society is facing. Indeed new religious debates – in which

⁴⁰ <http://www.franceinfo.fr/actu/economie/article/le-chateau-de-versailles-pourrait-bientot-abriter-un-hotel-717299>

the State has a stake⁴¹ – revolve around the transformation of some Places of Worship from one cult into another. This contemporary debate could prompt the rethinking of the Heritage of these listed buildings in as much as States “*do not know what to do with all these left churches*”, as a French CPO architect explained to me. One way to avoid struggles could be to define the building’s authenticity as a spiritual place dedicated to prayer ... without making any difference between religious orientations and denominations.

⁴¹ In its *Plan d’Action 2016*, i.e. its overall research strategy, the French National Agency of Research dedicated a specific research axis, which calls for a better comprehension of the fact of religious regarding to how its Heritage is conveyed (Challenge 8, Axis 5 in Plan d’Action ANR 2016, 2015).

REFERENCES

- Abernethy, D. 2000. *The Dynamics of global dominance: European overseas empires, 1415-1980*. New Haven, CT: Yale University Press.
- Adler, P.S., & Kwon, S.-W. 2013. The mutation of professionalism as a contested diffusion process: clinical guidelines as carriers of institutional change in medicine. *Journal of Management*, 50(5): 930-962.
- Aggeri, F. forthcoming. Qu'est-ce que la recherche-intervention? In N. Mottis & J. Barthélémy (Eds.), *Théorie et Pratique en management*. Paris: Dunod.
- Agogué, M., Arnoux, F., Brown, I., & Hooge, S. 2014. *An introduction to innovative design: elements and applications of C-K theory*. Paris: Presses des Mines.
- Agogué, M., & Boxenbaum, E. 2014. Idea generation in highly institutionalized fields: a dual process model of ideation. Paper presented in Division of OMT, Academy of Management Annual Meeting 2014.
- Aguilar, Y. 1982. La Chartreuse de Mirande: le monument historique, produit d'un classement de classe. *Actes de la recherche en sciences sociales*, 42: 76-85.
- Alexander, J.C. 1983. *Theoretical logic in sociology*. Berkeley, CA: University of California Press.
- Alvarez, J.L., Mazza, C., Strandgaard Pedersen, J. & Svejenova, S. 2005. Shielding idiosyncrasy from isomorphic pressures: towards optimal distinctiveness in European filmmaking. *Organization*, 12: 863-888.
- Amrein, U. 2009. *Das Authentische. Referenzen und Repräsentationen*. Zurich: Chronos.
- Amsellem, G. 2014. Viollet-le-Duc: architecte de la Table ronde. In L. De Finance & J.M. Leniaud (Eds.), *Viollet-le-Duc: les visions d'un architecte*: 9-13. Paris: Norma Éditions.
- Andrefsky, W., Jr. 2001. Emerging directions in debitage analysis. In W. Jr. Andrefsky (Eds.), *Lithic Debitage. Content, form, meaning*: 2-14. Salt Lake City: University of Utah Press.
- Anteby, M. 2008. *Moral Gray Zones: side productions, identity, and regulation in aeronautic plant*. Princeton, NJ: Princeton University Press.
- Appadurai, A. 1996. *Modernity at Large*. Minneapolis: University of Minnesota Press.
- Arrhenius, T. 2004. The cult of age in mass-society: Aloïs Riegl's theory of conservation. *Future Anterior*, 1(1): 74-80.
- Aristotle. *Physica*. In D. Ross (Eds.), *The Works of Aristotle vol. 2*. Oxford: Clarendon Press.
- Ashforth, B.E., & Gibbs, B.W. 1990. The double-edge or organizational legitimation. *Organization Science*, 1: 177-194.
- Atkinson, P., & Coffey, A. 2004. Analysing documentary realities. In D. Silverman (Ed.), *Qualitative research: theory, method, practice*: 56-75. London, UK: Sage Publications.
- Babelon, J.-P., & Chastel, A. 1994. *La notion de patrimoine*. Opinion Art. Paris: Éditions Liana Lévi.
- Baker, T. 2007. Resources in play: bricolage in the Toy Store(y). *Journal of Business Venturing*, 22(7): 694-711.
- Baker, T., & Aldrich, H.E. 2000. Responses to dependence: how dependence on key employees affects employment practices in entrepreneurial firms. Presented at the 10th Annual Global Conference on Entrepreneurship Research at Imperial College, London.
- Baker, T., Miner, A.S., & Eesley, D.T. 2003. Improvising firms: bricolage account giving, and improvisational competency in the founding process. *Research Policy*, 32: 255-276.
- Baker, T., & Nelson, E. 2005. Creating something from nothing: resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50: 329-366.
- Balsamo, I. 1997. André Chastel et l'aventure de l'Inventaire. In P. Nora (Ed.), *Science et conscience du patrimoine*: 255-267. Paris: Fayard & Éditions du Patrimoine.
- Banerjee, P.M., & Campbell, A. 2009. Inventor bricolage and firm technology research and development. *R&D Management*, 39(5): 473-485.
- Banks, M. 2007. *Using visual data in qualitative research*. Thousand Oaks, CA: Sage Publications.

- Barley, S.R. 1986. Technology as an occasion for structuring: evidence from observations of CT scanners and the social order of radiology departments. *Administrative Science Quarterly*, 31: 78-108.
- Barthes, R. 1957. *Mythologies*. (English Edition, 1972). NY: Farrar, Straus and Giroux.
- Battilana, J., & D'Aunno, T. 2009. Institutional work and the paradox of the embedded agency. In T.B. Lawrence, R. Suddaby & B. Leca (Eds.), *Institutional Work: actors and agency in institutional studies of organizations*: 31-58. Cambridge, UK: Cambridge University Press.
- Battilana, J., Leca, B., & Boxenbaum, E. 2009. How actors change institutions: towards a theory of institutional entrepreneurship. *Academy of Management Annals*, 3(1): 65-107.
- Baucus, M. & Rechner, P.L. 1995. Framing and reframing: a process model of ethical decision making. *International Association of Business and Society Proceedings*: 2-7.
- Baudrillard, J. 1970. *The Consumer Society: Myths and Structures*. London, UK: Sage Publications Limited.
- Beamish, T.D., & Biggart, N.W. 2012. The role of social heuristics in project centered production networks: insights from the commercial construction industry. *Engineering Project Organization Journal*, 2: 57-70.
- Bechky, B. 2008. Analysing artifacts: material methods for understanding identity, status, and knowledge in organizational life. In D. Barry & H. Hansen (Eds.), *The SAGE Handbook of new approaches in management and organization*: 98-109. Thousand, Oaks, CA: Sage Publications.
- Bechky, B.A. & Okhuysen, G.A. 2011. Expecting the unexpected? How SWAT officers and film crews handle surprises. *Academy of Management Journal*, 54(2): 239-261.
- Bélaval, P. 2013. *Pour faire rentrer le peuple au Panthéon: rapport à Monsieur le Président de la République*. Paris: Éditions du Patrimoine / CMN.
- Benford, R.D., & Snow, D.A. 2000. Framing processes and social movements: an overview and assessment. *Annual Review of Sociology*, 26: 611-639.
- Benhamou, F., & Thesmar, D. 2011. *Rapport: Valoriser le Patrimoine culturel de la France*. Paris: Direction de l'information légale et administrative.
- Benjamin, W. 1935/1979. The work of Art in the age of mechanical reproduction. In W. Benjamin (Ed.), *Illuminations*: 219-253. London, UK: Fontana/Collins.
- Bercé, F. 2000. *Des monuments historiques au Patrimoine du 18ème siècle à nos jours: ou les égarements du coeur et de l'esprit*. Paris: Flammarion.
- Berg, P.O., & Kreiner, K. 1990. Corporate architecture: turning physical setting into symbolic resources. In P. Gagliardi (Ed.), *Symbols and artifacts: views of the corporate landscape*: 41-67. New York: Walter de Gruyter.
- Berger, P.L., & Luckmann, T. 1967. *The social construction of reality: a treatise in the sociology of knowledge*. New York: Doubleday.
- Bijker, W.E., Hughes, T., & Pinch, T. 1987. *The social construction of technological systems: new directions in the sociology and history of technology*. Cambridge, MA: MIT Press.
- Bitektine, A. 2011. Toward a theory of social judgements of organizations: the case of legitimacy, reputation and status. *Academy of Management Review*, 36: 151-179.
- Bitektine, A., & Haack, P. 2015. The "macro" and the "micro" of legitimacy: toward a multilevel theory of the legitimacy process. *Academy of Management Review*, 40(1): 49-75.
- Blanc, A., & Huault, I. 2014. Against the digital revolution? Institutional maintenance and artefacts within the French recorded music industry. *Technological Forecasting and Social Change*, 83: 10-23.
- Blumer, H. 1969. *Symbolic interactionism: perspective and method*. Englewood Cliffs, NJ: Prentice Hall.
- Bohman, A., & Raitio, K. 2014. How frames matter – common sense and institutional choice in Ghana's urban water sector. *Journal of Environment & Development*, 23(2): 247-270.
- Boiral, O. 2003. ISO 9000: outside the iron cage. *Organization Science*, 14(6): 720-737.

- Boito, C. 1893. *Questioni Pratiche di Belle Arti: restauri, concorsi, legislazione, professione, insegnamento*. Milano: U. Hoepli.
- Boltanski, L., & Thévenot, L. 1991. *On Justifications: economics of worth*. Princeton, NJ: Princeton University Press.
- Bonneuil, C., & Joly, B. 2013. *Sciences, techniques et société*. Paris: La Découverte.
- Borum, F. 2004. Means-end frames and the politics and myths of organizational fields. *Organization Studies*, 25: 897-922.
- Borum, F., & Westenholtz, A. 1995. An organization's incorporation of institutional models: actors and institutional ambiguity. Organizational field multiplicity and the role of actors. In R.W. Scott & S. Christensen (Eds.), *The institutional construction of organizations*: 113-131. Thousand Oaks: Sage Publications.
- Bourdieu, P. 1979. *La Distinction: critique sociale du jugement*. Paris: Les Éditions de Minuit.
- . 1984. *Distinctions: a social critique of the judgement of taste*. Cambridge, UK: Cambridge University Press.
- Bowker, L.H., & Star, S.L. 1999. *Sorting things out: classification and its consequences*. Cambridge, MA: MIT Press.
- Boxenbaum, E. 2006. Lost in translation. The making of Danish diversity management. *American Behavioural Scientist*, 49(7): 939-948.
- Boxenbaum, E., & Battilana, J. 2005. Importation as innovation: transposing managerial practices across fields. *Strategic Organization*, 3(4): 355-383.
- Boxenbaum, E., Huault, I., & Leca, B. in press. Le tournant "matériel" dans la théorie néo-institutionnaliste. In F.-X. De Vaujany, A. Hussenot & J.-F. Chanlat (Eds.), *La théorie des organisations: les tendances actuelles*. Paris: Economica.
- Boxenbaum, E., & Jonsson, S. 2008. Isomorphism, Diffusion and Decoupling. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 78-98. London, UK: Sage Publications Ltd.
- Boxenbaum, E., & Rouleau, L. 2011. New knowledge products as bricolage: metaphors and scripts in organizational theory. *Academy of Management Review*, 36(2): 272-296.
- Boxenbaum, E., & Strandgaard Pedersen, J. 2009. Scandinavian Institutionalism: a case of institutional work. In T.B. Lawrence, R. Suddaby & B. Leca (Eds.), *Institutional Work: actors and agency in institutional studies of organization*: 178-204. New York: Cambridge University Press.
- Brand, S. 1995. *How building learn: what happens after they're built*. London: Penguin Books.
- Brandi, C. 1963. *Teoria del restauro*. Roma: Edizioni di storia e letteratura.
- Breckenridge, J.P., Jones, D., Elliott, I., & Nicol, M. 2012. Choosing a methodological path: reflections on the constructivist turn. *The Grounded Theory Review*, 11: 64-71.
- Brichet, R. 1952. *Le Régime des monuments historiques en France*. Paris: Librairies techniques.
- Brown, J.S., & Duguid, P. 1991. Organizational learning and communities of practice. *Organization Science*, 2(1): 40-57.
- . 2000. *The Social Life of Information*. Boston, MA: Harvard Business School Publishing.
- Brunsson, N. 2000. *The irrational organization: irrationality as a basis for organizational action and change*. Bergen, Norway: Fagbokforlaget.
- Brunsson, N., & Sahlin-Andersson, K. 2000. Constructing organizations: the example of public sector reform. *Organization Studies*, 21(4): 721-746.
- Bryant, A. 2002. Re-grounding grounded theory. *Journal of Information Technology Theory and Application*, 4(1): 25-42.
- Bryant, A., & Charmaz, K. 2007. *The SAGE Handbook of Grounded Theory*. London, UK: Sage Publications.
- Brøgger, J. 1994. Authenticity and Identity. Paper presented during the Conference on Authenticity in relation to the World Heritage Convention, Preparatory Workshop, Berge, Norway between January 31st and February 2nd.

- Buchanan, D.A. 1998. Representing process: the contribution of a re-engineering frame. *International Journal of Operations and Production Management*, 18: 1163-1188.
- Burrell, G., & Morgan, G. 1979. *Sociological paradigms and organisational analysis*. London, UK: Heinemann.
- Büyükdigan, I. A critical look at the new functions of Ottoman baths. *Building and Environment*, 38: 617-633.
- Cailleaux, C., & Bourhis, H. 2009. *Piscine Molitor*. Paris: Dupuis.
- Callon, M. 1986. Some elements of a sociology of translation: domestication of the scallops and the fishermen of St. Brieux Bay. In J. Law (Ed.), *Power, action and belief: a new sociology of knowledge?* 196-233. London, UK: Routledge.
- Callon, M., & Latour, B. 1981. Unscrewing the big Leviathan: how actors macro-structure reality and how sociologists help them to do so. In K. Knorr-Cetina & A. Cicourel (Eds.), *Advances in social theory and methodology: toward an integration of micro-and macro-sociologies*: 277-303. Boston, MA: Routledge.
- Campbell, J.L. 2004. *Institutional Change and Globalization*. Princeton, NJ: Princeton University Press.
- . 2005. Where do we stand? Common mechanisms in organizations and social movements research. In G.F. Davis, D. McAdam, W.R. Scott & M.N. Zald (Eds.), *Social Movements and Organization Theory*: 41-68. Cambridge, UK: Cambridge University Press
- Campbell, R., & Vanderwarker, P. 1992. *Cityscapes of Boston*. Boston, MA: Houghton Mifflin.
- Carlile, P.R., Nicolini, D., Langley, A., & Tsoukas, H. 2013. *How Matter Matters: objects, artifacts and materiality in organization studies*. Oxford: Oxford University Press.
- Caronna, C.A. 2004. The misalignment of institutional pillars: consequences for the U.S. health care field. *Journal of Health and Social Behaviour*, 45: 45-58.
- Cartel, M. 2013. *La fabrique de l'innovation institutionnelle: les marchés du carbone comme champs d'expérimentations managériales*. Thèse de Doctorat CGS Mines ParisTech: Paris.
- Chao, E. 1999. The Maoist shaman and the madman: ritual bricolage, failed ritual, and failed ritual theory. *Cultural Anthropology*, 14(4): 505-534.
- Charmaz, K. 1983. The grounded theory method: an explication and interpretation. In R.M. Emerson (Ed.), *Contemporary field research*: 109-126. Boston, MA: Little Brown.
- . 2000. Grounded theory: objectivist and constructivist methods. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd Edition): 509-536. London, UK: Sage Publications.
- . 2003. Grounded theory: objectivist and constructivist methods. In N.K. Denzin & Y.S. Lincoln (Eds.), *Strategies of qualitative inquiry* (2nd Edition): 249-291. London, UK: Sage Publications.
- . 2006. *Constructing Grounded Theory: a practical guide through qualitative analysis* (1st Edition). London, UK: Sage Publications.
- . 2007. Constructionism and the grounded theory method. In J.S. Holstein & J. Gubrium (Eds.), *Handbook of Constructionist Research*: 397-412. New York: Guilford.
- . 2014. *Constructing Grounded Theory* (2nd Edition). London, UK: Sage Publications.
- Charmaz, K., & Mitchell, R.G. 1996. The myth of silent authorship: self, substance, and style in ethnographic writing. *Symbolic Interaction*, 19(4): 285-302.
- . 2001 An invitation to grounded theory in ethnography. In P.A. Atkinson, A. Coffey, S. Delamont, J. Lofland & L. Lofland (Eds.), *Handbook of ethnography*: 160-174. London, UK: Sage Publications.
- Charmaz, K., & Olesen, V. 1997. Ethnographic research in medical sociology. *Sociological Methods and Research*, 25(4): 452-494.
- Chatillon, F. 2015. Le Patrimoine doit être moderne. *Programme Île de France des Journées européennes du Patrimoine* :17.
- Chesneau, G. 1932. *Notre École: histoire de l'école des Mines*. Paris: Self-publication.

- Choay, F. 1994. Sept propositions sur le concept d'authenticité et son usage dans les pratiques du patrimoine historiques. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 101-120. Japan: UNESCO World Heritage Centre & ICOMOS.
- . 2007. *L'allégorie du Patrimoine* (4th Edition). Paris: Seuil.
- . 2009. *Le Patrimoine en questions: anthologie pour un combat*. Paris: Seuil.
- Christensen, C.M. 1997. *The innovator's dilemma: when new technologies cause great firms to fail*. Cambridge, MA: Harvard Business Review Press.
- Christensen, S., Karnøe, P., Strandgaard Pedersen, J., & Dobbin, F. 1997. Action in institutions. *American Behavioral Scientist*, 40: 389-538.
- Chung, J.Y., Berger, B.K. & DeCoster, J. 2015. Developing measurement scales of organizational and issue legitimacy: a case of direct-to-consumer advertising in the Pharmaceutical industry. *Journal of Business Ethics* [published online 30/01/2015].
- Ciborra, C.U. 1992. From thinking to tinkering: the grassroots of strategic information systems. *The Information Society*, 8: 297-309.
- . 1996. *Teams, markets and systems: business innovation and information technology*. Cambridge, UK: Cambridge University Press.
- . 2002. *The labyrinths of information: challenging the wisdom of systems*. Oxford: Oxford University Press.
- Ciborra, C.U., & Lanzara, G.F. 1990. Designing dynamic artifact: computer systems as formative contexts. In P. Gagliardi (Ed.), *Symbols and artifacts: views of the corporate landscape*. Berlin: Degruyter.
- Clarke, A.E. 2005. *Situational analysis: grounded theory after the postmodern turn*. Thousand Oaks, CA: Sage Publications.
- . 2012. Feminisms, grounded theory, and situational analysis revisited. In S.N. Hess-Biber (Ed.), *Handbook of feminism research methods* (2nd Edition): 388-412. Thousand Oaks, CA: Sage Publications.
- Cleaver, F. 2001. Institutional bricolage, conflict and cooperation in Usangu, Tanzania. *IDS Bulletin*, 32(4): 26-35.
- . 2002. Reinventing institutions: bricolage and the social embeddedness of natural resource management. *The European Journal of Development Research*, 20(3): 11-30.
- Cleere, H. 1994. The evaluation of authenticity in the context of the World Heritage Convention. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 57-66. Japan: UNESCO World Heritage Centre & ICOMOS.
- Clemens, E.S. 1997. *The People's Lobby: organizational innovation and the rise of interest group politics in the United States, 1890-1925*. Chicago: University of Chicago Press.
- Cohen, M.D., March, J.G., & Olsen, J.P. 1972. A garbage can model of organizational choice. *Administrative Science Quarterly*, 17(1): 1-25.
- Collin, F. 2003. *Konstruktivisme* (Constructivism). Frederiksberg: Samfundslitteratur & Roskilde Universitetsforlag.
- Colombero, S. 2011. *Industrie du disque: et si une solution existait déjà?* Master Thesis, Strasbourg: EM Strasbourg.
- . 2012. *L'introduction de l'outil numérique "audioguide multimedia": quel impact organisationnel dans les institutions culturelles? Le cas du musée du quai Branly*. Research Master Thesis, Paris: Université Paris-Ouest & Mines ParisTech.
- . 2014. Bricolage as Institutional Maintenance Work: integrating new construction materials into heritage buildings. Paper presented during the International Workshop "Giving visual and material form to ideas, identity and imagination: Architecture, urbanism and sustainable construction" in Vienna (Austria) on May 12th 2014.
- . 2015. *The selection criteria of collective bricolage: the case of the Listed-Buildings Institution*, Paper presented in EURAM 2015.

- Colombero, S., Kokshagina, O., & Cartel, M. 2015. Institutional entrepreneurship and bricolage: the case of Louis Pasteur and the rabies vaccine design. Working-paper.
- Cornelissen, J.P., & Werner, M.D. 2014. Putting framing in perspective: a review of framing and frame analysis across the management and organizational literature. *Academy of Management Annals*, 8: 181-235.
- Cunha, J., Cunha, M., & Cunha, R. 2000. Improvisation and learning: soulmates or just friends? In M. Vartiainen, F. Avallone & N. Anderson (Eds.), *Innovative theories, tools, and practices in work and organizational psychology*: 307-320. Seattle, WA: Hogrefe and Huber.
- Currie, G., Lockett, A., Finn, R., Martin, G., & Waring, J. 2013. Institutional work to maintain professional power: recreating the model of medical professionalism. *Organization Studies*, 33(7): 937-962.
- Czarniawska-Joerges, B. 1990. *Merchants of meaning: management consulting in the Swedish public sector*. Berlin: de Gruyter.
- Czarniawska, B. 2008. How to misuse institutions and get away with it: some reflections on institutional theory(ies). In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism* 769-782. London, UK: Sage Publications Ltd.
- Czarniawska, B., & Joerges, B. 1996. Travels of ideas. In B. Czarniawska & G. Sevón (Eds.), *Translating Organizational Change*: 13-48. Berlin: Walter de Gruyter.
- Czarniawska, B., & Sevón, G. 1996. Introduction. In B. Czarniawska & G. Sevón (Eds.), *Translating Organizational Change*: 1-12. Berlin: Walter de Gruyter.
- . 2005. *Global ideas: how ideas, objects and practices travel in the global economy*. Malmö, Sweden: Liber and Copenhagen Business School Press.
- D'Andrade, R.G. 1984. Cultural meaning systems. In R.A. Shweder & R.A. Levine (Eds.), *Culture Theory: essays on Mind, Self, and Emotion*: 88-119. Cambridge, UK: Cambridge University Press.
- D'Avilier, A.C. 1710. *Cours d'architecture qui comprend les ordres de Vignole avec des commentaires*. Paris: Jean Mariette.
- Dacin, M.T. 1997. Isomorphism in context: the power and prescription of institutional norms. *Academy of Management Journal*, 40(1): 46-81.
- Dacin, M.T., Goodstein, J., & Scott, W.R. 2002. Institutional theory and institutional change: introduction to the special research forum. *Academy of Management Journal*, 45(1): 45-56.
- Dacin, P.A., Dacin, M.T., & Matera, M. 2010. Social entrepreneurship: why we don't need a new theory and how we move forward from here. *Academy of Management Perspectives*, 24(3): 37-57.
- David, A. 2012. Logique, épistémologie et méthodologie en sciences de gestion: trois hypothèses revisitées. In A. David, A. Hatchuel & R. Laufer (Eds.), *Les nouvelles fondations des sciences de gestion* (2nd Edition): 111-142. Paris: Presses des Mines.
- Davis, G.F. 2010. Do theories of organizations progress? *Organizational Research Methods*, 13(4): 690-709.
- Davis, K. 1949. *Human Society*. New York: Macmillan.
- De Certeau, M. 1993. *La Culture au pluriel*. Paris: Le Seuil.
- De Jarcy, X. 2015. La Samaritaine aura bien son "rideau de douche". *Télérama*, June 22nd.
- De Klerk, S. 2015. The creative industries: an entrepreneurial bricolage perspective. *Management Decision*, 53(4): 828-842.
- De Montclos, V. 2014a. Ceux qui massacrent la France. *Le Point*, 2167: 62-69.
- . 2014b. La bête noire des élus. *Le Point*, 2167: 74-75.
- De Vaujany, F.-X. 2011. Revisiter l'appropriation des outils de gestion: la vision improvisationnelle de Ciborra. In C. Dominguez-Péry (Eds.), *Valeurs et outils de gestion – De la dynamique d'appropriation au pilotage*: chapitre 1. France: Hermes Science Publications.
- De Vaujany, F.-X., & Vaast, E. 2014. If these walls could talk: the mutual construction of organizational space and legitimacy. *Organization Science*, 25(3): 713-731.

- Deephouse, D.L. 1999. To be different, or to be the same? It's a question (and theory) of strategic balance. *Strategic Management Journal*, 20: 147-166.
- Deephouse, D.L., & Suchman, M. 2008. Legitimacy in Organizational institutionalism. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 49-78. London, UK: Sage Publications Ltd.
- Deetz, S. 1996. Describing differences in approaches to organization science: rethinking Burrell & Morgan and their legacy. *Organization Science*, 7(2): 191-207.
- Déjean, F., Gond, J.P., & Leca, B. 2004. Measuring the unmeasured: an institutional entrepreneur strategy in an emerging industry. *Human Relations*, 57(6): 741-764.
- DeJordy, R., & Jones, C. 2008. Institutional Legitimacy. In S.R. Clegg & J.R. Bailey (Eds.), *International Encyclopedia of Organization Studies*: 683:684. Thousand Oaks, CA: Sage Publications, Inc.
- Deleuze, G. 1972. *Anti-Oedipus: Capitalism and Schizophrenia*. (Reprint Edition, 1983) University of Minnesota Press.
- Denzin, N.K. 1989. *The research act: a theoretical introduction to sociological methods* (3rd Edition). Englewood Cliffs, NJ: Prentice Hall.
- Denzin, N.K., & Lincoln, Y.S. 2000. Introduction: the discipline and practice of qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd Edition): 1-29. London, UK: Sage Publication.
- Desa, G. 2012. Resource mobilization in international social entrepreneurship: bricolage as a mechanism of institutional transformation. *Entrepreneurship Theory and Practice*, 36(4): 727-751.
- Dethier, J. 1978. Réutiliser les bâtiments désaffectés? *Bâtiments anciens ... Usages nouveaux*: 50-52.
- Di Domenico, M.L., Haugh, H., & Tracey, P. 2010. Social bricolage: theorizing social value creation in social enterprises. *Entrepreneurship Theory and Practice*: 681-703.
- Diderot, D. 1772. *Regrets sur ma vieille robe de chambre ou avis à ceux qui n'ont plus gout que de fortune*. Paris: Unofficial publication.
- Diez, F. 2012. Heritage. In C.G. Crysler, S. Cairns & H. Heynen (Eds.), *The SAGE Handbook of Architectural Theory*: 274-287. London: Sage Publications.
- DiMaggio, P.J. 1988. Interest and agency in institutional theory. In L.G. Zucker (Eds.), *Institutional patterns and organizations: culture and environment*: 3-21. Cambridge, MA: Ballinger.
- . 1991. Constructing an organizational field as a professional project: U.S. art museums, 1920-1940. In W.W. Powell & P.J. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: 267-292. Chicago: University of Chicago Press.
- . 1997. Culture and cognition: an interdisciplinary review. *Annual Review of Sociology*, 23: 263-287.
- DiMaggio, P.J., & Powell, W.W. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48: 147-160.
- . 1991. Introduction. In W.W. Powell & P.J. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis*: 1-38. Chicago: University of Chicago Press.
- Dipert, R. 1993. *Artifacts, Art Works, and Agency*. Philadelphia: Temple University Press.
- Djeclic, M.-L., & Quack, S. 2003. *Globalization and institutions: redefining the rules of the economic game*. Cheltenham, UK: Edward Elgar.
- Dobbin, F. 1994. *Forging industrial policy. The United-States, Britain and France in the Railway age*. Cambridge: Cambridge University Press.
- Dolšák, N., & Ostrom, E. 2003. *The Commons in the New Millennium: Challenge and Adaptation*. Cambridge, MA: The MIT Press.
- Donnedieu de Vabres, R. 2006. Préface. In D. Rouillard (Ed.), *Architectures contemporaines et monuments historiques: guide des réalisations en France depuis 1980*: 8. Paris: Éditions Le Moniteur.

- Douglas, M. 1982. The effects of modernization on religious change. *Daedalus*, Winter: 1-19.
- . 1986. *How institutions think*. (1st Edition) Syracuse University Press.
- Dover, G., & Lawrence, T.B. 2010. Technology, institutions and entropy: understanding the critical and creative role of maintenance work. In *Technology and Organization 29: Essay in honour of Joan Woodward*: 259-264.
- Dowling, J. & Pfeffer, J. 1975. Organizational legitimacy: social values and organizational behavior. *Pacific Sociological Review*, 18: 122-136.
- Dumez, H. 2013. *Méthodologie de la recherche qualitative*. Paris, France: Vuibert.
- Durkheim, É. 1912. *The Elementary Forms of Religious Life*. New York: Collier Books.
- Duymedjian, R. 2010. Métaphore, concept ou ...? Essai de construction de l'idéal-type du bricoleur. In F. Odin & C. Thuderoz (Eds.), *Des mondes bricolés? Arts et sciences à l'épreuve de la notion de bricolage*: 77-89. Metis Lyon Tech: PPUR.
- Duymedjian, R., & Rüling, C. 2010. Towards a foundation of bricolage in organization and management theory. *Organization Studies*, 31(2): 133-151.
- Eco, U. 1962. *Opera aperta, forma e indeterminazione nelle poetich contemporanee*. Milano: Bompiani.
- Edelman, L.B. 1992. Legal ambiguity and symbolic structures: organizational mediation of civil rights law. *American Journal of Sociology*, 97: 1531-1576.
- Eisenhardt, K.M. 1989. Building theories from case study research. *Academy of Management Review*, 14: 532-550.
- Eisenhardt, K.M., & Graebner, M.E. 2007. Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50(1): 25-32.
- Eisenstein, E. 1979. *The printing press as an agent of change: communications and cultural transformations in early modern Europe*. Cambridge: Cambridge University Press.
- Elliott, C.S., Hayward, D.M., & Canon, S. 1998. Institutional framing: some experimental evidence. *Journal of Economic Behavior & Organization*, 35: 455-464.
- Elsbach, K.D. & Sutton, R.I. 1992. Acquiring organizational legitimacy through illegitimate actions: a marriage of institutional and impression management theories. *Academy of Management Journal*, 35: 699-738.
- Emerson, R., Fretz, R., & Shaw, L. 1995. *Writing ethnographic field-notes*. Chicago: Chicago University Press.
- Emirbayer, M. & Mische, A. 1998. What is agency? *American Journal of Sociology*, 103: 962-1023.
- Eriksson, P., & Kovalainen, A. 2008. *Qualitative Methods in business research*. London, UK: Sage Publications.
- Esterberg, K.G. 2002. *Qualitative methods in social research*. Boston, MA: McGraw-Hill.
- Fabre, D. 2000a. Ancienneté, altérité, autochtonie, In D. Fabre (Ed.), *Domestiquer l'histoire. Éthnologie des monuments historiques*: 195-208. Paris: Éditions de la Maison des sciences de l'homme
- . 2000b. L'ethnologie devant le monument historique, In D. Fabre (Ed.), *Domestiquer l'histoire. Éthnologie des monuments historiques*: 1-29. Paris: Éditions de la Maison des sciences de l'homme.
- Farashahi, M., Hafsi, T.E. & Molz, R. 2005. Institutionalized norms of conduction research and social realities: a research synthesis of empirical works from 1983 to 2002. *International Journal of Management Reviews*, 7(1): 1-24.
- Faulconbridge, J.R. 2013. Mobile "green" design knowledge: institutions, bricolage and the relational production of embedded sustainable building designs. *Transactions of the Institute of British Geographers*, 38(2): 339-353.
- Fejérdy, T. 1994. Authenticité dans la restauration des monuments historiques. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 211-216. Japan: UNESCO World Heritage Centre & ICOMOS.

- Feldman, M.S., & Orlikowski, W.J. 2011. Theorizing practice and practicing theory. *Organization Science*, 22(5): 1240-1253.
- Fiol, C.M. 2002. Intraorganizational cognition and interpretation. In J.A.C. Baum (Eds.), *The Blackwell Companion to Organizations*: 119-137. Oxford, UK: Blackwell.
- Fiss, P.C., & Zajac, E.J. 2006. The symbolic management of strategic change: sensegiving via framing and decoupling. *Academy of Management Journal*, 49: 1173-1193.
- Flyvbjerg, R. 2006. Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2): 219-245.
- Fontana, A., & Frey, J. 1994. Interviewing. In N.K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (1st Edition): 361-376. London, UK: Sage Publications.
- Friedland, R. 2013. God, love and other good reasons for practice: thinking through institutional logics. *Research in the Sociology of Organizations*, 39A: 25-50.
- Gady, A. 2014. Y'a-t-il quelqu'un pour sauver Paris. *Le Point*, 2167: 70.
- Gagliardi, P. 1990. Artifacts as pathways and remains of organizational life. In P. Gagliardi (Ed.), *Symbols and artifacts: views of the corporate landscape*: 3-38. New York: Walter de Gruyter.
- Garud, R., & Karnøe, P. 2003. Bricolage versus breakthrough: distributed and embedded agency in technology entrepreneurship. *Research Policy*, 32: 277-300.
- Gawer, A., & Phillips, N. 2013. Institutional work as logics shift: the case of Intel's transformation to platform leader. *Organization Studies*, 34(8): 1035-1071.
- Geertz, C. 1973. *The interpretation of Cultures*. New York: Basic Books.
- Gephart, R.P. 2004. Qualitative research and the Academy of Management Journal. *Academy of Management Journal*, 47(4): 454-462.
- Gherardi, S. Meriläinen, S., Strati, A., & Valtonen, A. 2013. Editor's introduction: a practice-based view on the body, senses, and knowing in organization. *Scandinavian Journal of Management*, 29(4): 333-337.
- Giddens, A. 1984. *The Construction of Society*. Berkeley, CA: University of California Press.
- Gieryn, T.F. 2002. What buildings do. *Theory and Society*, 31: 35-74.
- Gillham, B. 2005. *Research interviewing: the range of techniques*. Berkshire: Open University Press.
- Gioia, D.A., & Chittipeddi, K. 1991. Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12: 433-448.
- Gioia, D.A., Schultz, M., & Corley, K.G. 2000. Organizational identity, image and adaptive instability. *Academy of Management Review*, 25(1): 63-81.
- Giovannoni, G. 1931. *L'urbanisme face aux villes anciennes*. Paris: Essais Points.
- Glaser, B.G. 1978. *Theoretical sensitivity*. Mill Valley, CA: Sociology Press.
- . 1998. *Doing grounded theory: issues and discussions*. Mill Valley, CA: Sociology Press.
- . 2005. *The grounded theory perspective III: theoretical coding*. Mill Valley, CA: Sociology Press.
- Glaser, B.G., & Strauss, A.L. 1967. *The discovery of grounded theory: strategies for qualitative research*. Chicago: Aldine.
- Glynn, M.A. 2008. Beyond constraint: how institutions enable identities. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 413-430, London, UK: Sage Publications Ltd.
- Glynn, M.A., & Abzug, R. 2002. Institutionalizing identity: symbolic isomorphism and organizational names. *Academy of Management Journal*, 45(1): 267-280.
- Glynn, M.A., & Lounsbury, M. 2005. From the critics corner: logic blending, discursive change and authenticity in a cultural production system. *Journal of Management Studies*, 42(5): 1031-1055.
- Godelier, M. 2007. *Au fondement des sociétés humaines: ce qui nous apprend l'anthropologie*. Paris: Albin Michel.
- Goffman, E. 1984. *Frame analysis*. Cambridge, MA: Harvard University Press.

- Gold, R. 1969. Roles in sociological field observation. In G. McCall & J. Simmons (Eds.), *Issues in participant observation: a text and reader*. London, UK: Addison Wesley.
- Gopnik, A., Meltzoff, A.N., & Kuhl, P.K. 1999. *The scientist in the crib: Minds, brains, and how children learn*. New York: Morrow.
- Goven, F. 2006. Introduction. In D. Rouillard (Ed.), *Architectures contemporaines et monuments historiques: guide des réalisations en France depuis 1980*: 12-17. Paris: Éditions Le Moniteur.
- . 2011. Introduction aux Rencontres. In V.Elbé & L. Walker (Eds.), *Reconvertir le Patrimoine*: 10-13. Paris: Éditions Lieux Dits.
- Granovetter, M. 1973. The strength of weak ties. *American Journal of Sociology*, 78: 1360-1380.
- Greenwood, R., Oliver, C. Sahlin, K. & Suddaby, R. 2008. Introduction. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 1-47, London, UK: Sage Publications Ltd.
- Greenwood, R., Suddaby, R., & Hinings, C.R. 2002. Theorizing change: the role of professional association in the transformation of institutional fields. *Academy of Management Journal*, 45: 58-80.
- Guba, E.G. 1990. The alternative paradigm dialog. In E.G. Guba (Ed.), *The paradigm dialog*: 17-30. Newbury Park, CA: Sage Publications.
- Guillaume, M. 1980. *La politique du patrimoine*. Paris: Galilée.
- Guizot, F. 1830. Rapport présenté au Roi le 21 Octobre 1830 (pour faire instituer un inspecteur général des monuments historiques de France). In M. Guizot (Ed.) *Mémoires pour servir à l'histoire de mon temps* (1859): 385-289. Paris: Michel Lévy Frères.
- Hallett, T., & Vetresca, M.J. 2002. Inhabited institutions: social interactions and organizational forms in Gouldner's *Patterns of Institutional Bureaucracy*. *Theory and Society*, 35: 213-236.
- Hargadon, A., & Douglas, Y. 2001. When innovations meet institutions. Edison and the design of the electric light. *Administrative Science Quarterly*, 46(4): 476-501.
- Hargadon, A., & Sutton, R.I. 1997. Technology brokering and innovation in a product development firm. *Administrative Science Quarterly*, 42(4): 716-749.
- Harmon, D.J., Green, S.E., & Goodnight, G.T. 2015. A model of rhetorical legitimation: the structure of communication and cognition underlying institutional maintenance and change. *Academy of Management Review*, 40(1): 76-95.
- Harper, D. 1994. On the authority of the image. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research*: 403-412. Thousand Oaks, CA: Sage Publications.
- . 2002. Talking about pictures: a case for photo elicitation. *Visual Studies*, 17: 13-26.
- Harrison, S.H., & Corley, K.G. 2011. Clean climbing, carabiners, and cultural cultivation: developing an open-systems perspective of culture. *Organization Science*, 22(2): 391-412.
- Hatchuel, A., & Molet, H. 1986. Rational modelling in understanding and aiding human decision-making: about two case-studies. *European Journal of Operational Research*, 24: 178-186.
- Heclo, H. 2008. *On Thinking Institutionally (On Politics)*. Boulder, CO: Paradigm Publishers.
- Heidegger, M. 1935. *Der Ursprung des Kunstwerkes*. In *Holzwege* (1980): 1-72. Frankfurt am Main: Klostermann.
- Heinich, N. 1995. Les Colonnes de Buren au Palais-Royal: ethnographie d'une affaire. *Ethnologie française*: 4.
- . 2009. *La fabrique du patrimoine. De la cathédrale à la petite cuillère*. Paris: Éditions de la Maison des Sciences de l'Homme.
- Herzog, J. 2000. Londres change de tête. *D'architectures*, 103.
- Hilpinen, R. 1992. Artifacts and works of Art. *Theoria*, 58: 58-82.
- . 1993. Authors and Artifacts. *Proceedings of the Aristotelian Society*, 93: 155-178.
- . 1995. Beliefs systems as artifacts. *The Monist*, 78: 136-155.
- . 2011. Artifact. In E.N. Zalta (Eds.), *The Stanford Encyclopedia of Philosophy*. cf. <<http://plato.stanford.edu/archives/win2011/entries/artifact/>>

- Hirsch, P.M. 1997. Sociology without social structure: neo-institutional theory meets brave new world. *American Journal of Sociology*, 102(6): 1702-1723.
- Hitchin, L., & Maskymiw, W. 2009. STS and management education: theory and practice. *Organization*, 16(1): 57-80.
- Hladik, M. 2008. *Traces et fragments dans l'esthétique japonaise*. Paris: Mardaga.
- Hoffmann, A.J. 1997. *From Heresy to Dogma: an institutional history of corporate environmentalism*. San Francisco: New Lexington Press.
- Hoffmann, A.J., & Ventresca, M.J. 1999. The institutional framing of policy debates: economics versus the environment. *American Behavioral Scientist*, 42: 1368-1392.
- Hofstede, G. 1991. *Culture and organizations: software of the mind*. New York: McGraw-Hill.
- Holstein, J.A., & Gubrium, J.F. 1995. *The active interview*. Thousand Oaks, CA: Sage Publications.
- Holton, J.A. 2007. The coding process and its challenges. In A. Bryant and K. Charmaz (Eds.), *Handbook of grounded theory*: 265-289. London, UK: Sage Publications.
- Hubert, Y. 2011. Portfolio Patrimoine reutilises de Seine-et-Marne. In V.Elbé & L. Walker (Eds.), *Reconvertir le Patrimoine*: 206-237. Paris: Éditions Lieux Dits.
- Hudson, L.A., & Ozanne, J.L. 1988. Alternative ways of seeking knowledge in consumer research. *Journal of Consumer Research*, 14(4): 508-521.
- Hughes, T.P. 1983. *Networks of power. Electrification in Western Society, 1880-1930*. Baltimore: Johns Hopkins University Press.
- Hull, N.E.H. 1991. Networks and bricolage: a prolegomenon to history of 20th-century American academic jurisprudence. *American Journal of Legal History*, 35(3): 307-322.
- Hugo, V. 1825. Guerre aux démolisseurs! In V. Hugo (Ed.), *Littérature et Philosophie Mêlées* (1834): 317-342. Paris: Eugène Renduel.
- Hwang, H., & Colyvas, J. 2011. Problematizing actors and institutions in institutional work. *Journal of Management Inquiry*, 20: 62-66.
- Hwang, H., & Suárez, D. 2005. Lost and found in the translation of strategic plans and websites. In B. Czarniawska & G. Sevón (Eds.), *Global ideas: how ideas, objects and practices travel in the global economy*: 71-93. Sweden: Liber & Copenhagen Business School Press.
- Højgaard Christiansen, L. 2013. *Brewing organizational responses to institutional logics*. Ph.D. Dissertation, IOA, CBS: Copenhagen Business School Press.
- Højgaard Christiansen, L., & Lounsbury, M. 2013. Strange brew: bridging logics via institutional bricolage and the reconstitution of organizational identity. *Research in the Sociology of Organizations*, 39B: 199-232.
- Inaba, N. 1994. What is the test of authenticity for intangible properties? In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 329-332. Japan: UNESCO World Heritage Centre & ICOMOS.
- Innes, J.E. 1995. Planning theory's emerging paradigm: communicative action and interactive practice. *Journal of Planning Education and Research*, 14(3): 183-189.
- Innes, J.E., & Booher, D.E. 1999. Consensus building as role playing and bricolage. *Journal of the American Planning Association*, 65(1): 9-26.
- Innis, H.A. 1995. *Staples, Markets, and Cultural Change: selected essays*. In Daniel Drache (Eds.). Montreal: McGill-Queen University Press.
- Ito, N. 1994. "Authenticity" inherent in cultural Heritage in Asia and Japan. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 35-46. Japan: UNESCO World Heritage Centre & ICOMOS.
- Järvinen, M. 2005. Interviews i en Interaktionistisk Begrebsramme. In M. Järvinen and N. Mik-Meyer (Eds.), *Kvalitative Metoder i et Interaktionistisk Perspektiv (Qualitative Methods in an Interactionist Perspective)*. Copenhagen: Hans Reitzels Forlag.
- Järvinen, M., & Mik-Meyer, N. 2005. Observationer i en Interaktionistisk Begrebsramme (Observations in an Interactionist Perspective). In M. Järvinen & N. Mik-Meyer (Eds.), *Kvalitative Metoder i et Interaktionistisk Perspektiv*. Copenhagen: Hans Reitzels Forlag.

- Jaouen, A., Nakara, W., Vedel, B., Gabarret, I., & Dandria, A. 2015. Bricolage and effectuation in the process of creation and development of small incubators. Paper presented in EURAM 2015.
- Jeanelle, J._L. 2009. "Le Patrimoine en question. Anthologie pour un combat", de Françoise Choay: chefs-d'oeuvre en péril. *Le Monde*, December 3rd.
- Jepperson, R.L. 1991. Institutions, institutional effects, and institutionalism. In W.W. Powell & P.J. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis*: 143-163. Chicago: University of Chicago Press.
- Jodelet, S. 1989. Représentations sociales: un domaine en expansion. In D. Jodelet (Ed.), *Les représentations sociales*: 47-78. Paris: PUF.
- Joerges, B., & Czarniawska, B. 1998. The question of technology, or how organizations inscribe the world. *Organization Studies*, 19(3): 363-385.
- Johannisson, B., & Olaison, L. 2007. The moment of truth. Reconstructing entrepreneurship and social capital in the eye of the storm. *Review of Social Economy*, LXV: 55-78.
- Johnson, C. 2004. Introduction: legitimacy processes in organizations. In C. Johnson (Eds.), *Research in the Sociology of Organizations*, 22: 1-24. Amsterdam: Elsevier.
- Jokilehto, J. 1986. *A history of Architectural Conservation*. Institute of advanced architectural studies Ph.D. Thesis: University of York, UK.
- . 1994. Authenticity: a general framework for the concept. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 17-34. Japan: UNESCO World Heritage Centre & ICOMOS.
- Jones, C. forthcoming. Book review "P.R, Carlile, D. Nicolini, A. Langley, H. Tsoukas (Eds.), *How Matter Matters: objects, artifacts and materiality in Organization Studies*. *Administrative Science Quarterly*.
- Jones, C., Boxenbaum, E., & Anthony, C. 2013. The immateriality of the material institutional logics. *Research in the Sociology of Organizations*, 39A: 51-75.
- Jones, C., Maoret, M., Massa, F.G., & Svejenova, S. 2012. Rebels with a cause: formation, contestation and expansion of the de Novo category "Modern Architecture" (1870-1975). *Organization Science*, 23: 1523-1545.
- Jones, C., & Massa, F.G. 2013. From novel practice to consecrated exemplar: Unity Temple as a case of institutional evangelizing. *Organization Studies*, 34: 1099-1136.
- Jones, O., McPherson, A., & Jayawarna, D. 2014. *Resourcing the Start-up business: creating dynamic entrepreneurial learning capabilities*. Abingdon, UK: Routledge.
- Justesen, L. & Mik-Meyer, N. 2012. *Qualitative research methods in organization studies* (1st Edition). Copenhagen: Hans Reitzels Forlag.
- Kamens, D.H. 2012. *Beyond the Nation-State: The reconstruction of Nationhood and Citizenship*. Research in Sociology of Education, 18. Emerald Group Publishing Limited.
- Katz, M.L., & Shapiro, C. 1985. Network externalities, competition, and compatibility. *American Economic Review*, 75: 424-440.
- Kersaint, A.-G. 1791. *Discours sur les monuments publics*, pronounced at the Conseil du département de Paris on December 15th.
- King, B.G., Clemens, E.S., & Fry, M. 2011. Identity realization and organizational forms: differentiation and consolidation of identities among Arizona's charter schools. *Organization Science*, 22(3): 554-572.
- Klein, H.K., & Myers, M.D., 1999. A set of principles for conducting and evaluating field studies in information systems. *MIS Quarterly*, 23(1): 67-94.
- Knoepfli, A. & Hering-Mitgau, M. 1985. *Les Inventaires du patrimoine artistique, architectural et culturel dans les pays européens*. Strasbourg: Council of Europe.
- Köhler, W. 1917. *Intelligenzprüfungen an anthropoiden (Mentality of Apes)*. Berlin: Königl. Akademie der Wissenschaften.
- . 1929. *Psychologie de la Forme* (2000). Paris: Folio Essais.

- Kraatz, M., & Block, E. 2008. Organizational implications of institutional pluralism. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 243-276. London, UK: Sage Publications Ltd.
- Kreiner, K. 2012. Organization decision mechanisms in an architectural competition. *Research in the Sociology of Organizations*, 36: 399-429.
- Kreiner, K., Jacobsen, P.H., & Jensen, D.T. 2011. Dialogues and the problems of knowing. Reinventing the architectural competition. *Scandinavian Journal of Management*, 27(1): 160-166.
- Kuhn, T.S. 1970. *The structure of scientific revolutions (2nd Edition)*. Chicago: University of Chicago Press.
- Kvale, S. 1996. *InterViews: an introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.
- Langston, C., & Shen, L. 2007. Application of the adaptive reuse potential model in Hong Kong: a case study of Lui Seng Chun. *International Journal of Strategic Property Management*, 11(4): 193-207.
- Lanzara, G.F. 1999. Between transient constructs and persistent structures: designing systems in action. *Journal of Strategic Information System*, 8: 331-349.
- Lanzara, G.F., & Patriotta, G. 2001. Technology in the courtroom: an inquiry into knowledge making in organizations. *Journal of Management Studies*, 38: 943-971.
- Lanzara, G.F., & Patriotta, G. 2007. The institutionalization of knowledge in an automotive factory: templates, inscriptions and the problem of durability. *Organization Studies*, 28(5), 635-660.
- Larsen, K.E. 1994. "The test of authenticity" and national heritage legislation. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 363-364. Japan: UNESCO World Heritage Centre & ICOMOS.
- Latour, B. 1987. *Science in action: how to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.
- . 1993. *The pasteurization of France*. Cambridge, MA: Harvard University Press.
- . 1996. On interobjectivity. *Mind, Culture, and Activity*, 3: 228-245.
- . 2000. When things strike back: a possible contribution to "sciences studies" to the social sciences. *The British Journal of Sociology*, 51: 107-123.
- . 2005. *Reassembling the social: an introduction to actor-network-theory*. Oxford, UK: Oxford University Press.
- Lawrence, T.B., Leca, B., & Zilber, T.B. 2013. Institutional Work: current research, new directions and overlooked issues. *Organization Studies*, 34(8): 1023-1033.
- Lawrence, T.B., & Phillips, N. 2004. From Moby Dick to Free Willy: macro-cultural discourse and institutional entrepreneurship in emerging institutional fields. *Organization*, 11(5): 689-711.
- Lawrence, T.B., & Suddaby, R. 2006. Institutions and Institutional work. In S.R. Clegg, C. Hardy, T.B. Lawrence & W.R. Nord (2nd Ed.), *The Sage Handbook of Organization Studies*: 215-254. London: Sage Publications Ltd.
- Lawrence, T.B., Suddaby, R., & Leca, B. 2009. *Institutional work: actors and agency in institutional studies of organization*. New York: Cambridge University Press.
- Le Masson, P., Weil, B., & Hatchuel, A. 2006. *Les processus d'innovation*. Paris: Hermès/Lavoisier.
- Le Moigne, J.L. 1995. *Les épistémologies constructivistes*. Que-sais-je? n° 2969. Paris: PUF.
- Leblanc, S. Faut-il reconstruire la fleche de la basilique de Saint-Denis? *20 Minutes*, 2878: 12.
- Leca, B., & Naccache, P. 2006. A critical realist approach to institutional entrepreneurship. *Organization*, 13(5): 627-665.
- Leniaud, J.M. 2014. Les visions du Grand Duc. In L. De Finance & J.M. Leniaud (Eds.), *Viollet-le-Duc: les visions d'un architecte*: 14-21. Paris: Norma Éditions.
- Leonardi, P.M., Nardi, B.A., & Kallinikos, J. 2012. *Materiality and organizing: social interaction in a technological world*. Oxford, UK: Oxford University Press.
- Lévi-Strauss, C. (1962/1966). *The Savage Mind*. Chicago: University of Chicago Press.

- . 1971. Race et culture. *Revue internationale des sciences sociales*, 13(4).
- Lincoln, Y.S., & Guba, E.G. 1985. *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- . 2000. Paradigmatic controversies, contradictions and emerging confluences. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd Edition): 163-188. London, UK: Sage Publication.
- Linna, P. 2013. Bricolage as a means of innovating in a resource-scarce environment: a study of innovator-entrepreneurs at the BOP. *Journal of Developmental Entrepreneurship*, 18(3): 1-23.
- Linstead, S., & Grafton-Small, R. 1990. Organization bricolage. In B.A. Turner (Eds.), *Organizational symbolism*: 291-309. Berlin: De Gruyter.
- Litzky, B.E., & McLean, T.L. 2008. Institutional framing. In R.W. Kolb (Ed.), *Encyclopedia of Business Ethics and Society*: 1138-1140. Thousand Oaks, CA: Sage Publications.
- Locke, K. 2001. *Grounded theory in management research*. London, UK: Sage Publications.
- Loriers, M.C. 1986. Pour une mise en scène des cimaises. *Techniques & Architecture*, 368.
- Lounsbury, M., & Crumley, E. 2007. New practice creation: an institutional perspective on innovation. *Organization Studies*, 28: 993-1012.
- Lounsbury, M., Ventresca, M., & Hirsch, P.M. 2003. Social movements, field frames and industry emergence: a cultural-political perspective on US recycling. *Socio-Economic Review*, 1: 71-104.
- Lowenthal, D. 1994. Changing criteria of Authenticity. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 121-136. Japan: UNESCO World Heritage Centre & ICOMOS.
- Lukes, S. 1974. *Power: a radical view*. London, UK: McMillan Press.
- Maguire, S., Hardy, C., & Lawrence, T.B. 2004. Institutional entrepreneurship in emerging field: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal*, 47: 657-669.
- Mair, J., & Martí, I. 2009. Entrepreneurship in and around institutional voids: a case study from Bangladesh. *Journal of Business Venturing*, 24: 419-435.
- March, J.G., & Olsen, J.P. 1984. The new institutionalism: organizational factors in political life. *American Political Science Review*, 78: 734-749.
- . 1986. Garbage can models of decision making in organizations. In J.G. March & R. Weissinger-Babylon (Eds.), *Ambiguity and command: organizational perspectives on military decision making*. Cambridge, MA: Pitman.
- . 1989. *Rediscovering Institutions: the organizational basis of politics*. New York: Free Press.
- . 2006. Elaborating the "New Institutionalism", In R.A.W. Rhodes, S. Binder & B. Rockman (Eds.), *The Oxford Handbook of Political Institutions*: 3-20. Oxford: Oxford University Press.
- March, J.G., & Simon, H.A. 1958. *Organizations*. New York: Wiley.
- Marcotte, P., & Bourdeau, L. 2010. La promotion des sites du Patrimoine mondial de l'UNESCO: compatible avec le développement durable? *Management & Avenir*, 34: 270-288.
- Markus, H., & Zajonc, R.B. 1985. The cognitive perspective in social psychology. In G. Lindzey & E. Aronson (3rd Edition), *Handbook of Social Psychology*, 1: 137-230. New York: Random House.
- Martel, Y. 2001. *Life of Pi*. Knopf Canada.
- Martí, I., & Fernández, P. 2013. The institutional work of Oppression and Resistance: learning from the Holocaust. *Organization Studies*, 34(8): 1195-1223.
- Martin, V.B. 2006. The postmodern turn: shall classic grounded theory take that detour? *The Grounded Theory Review*, 5: 119-128.
- Maxwell, J.A. 1998. Designing a qualitative study. In L. Bickman & D. Rog (Eds.), *Handbook of applied social research methods*: 69-100. Thousand Oaks, CA: Sage Publications.
- Mazza, C., Sahlin-Andersson, K., & Strandgaard Pedersen, J. 2005. European constructions of an American model: developments of four MBA programmes. *Management Learning*, 36(4): 471-491

- McAdam, D., Tarrow, S., & Tilly, C. 2001. *Dynamics of contention*. Cambridge, UK: Cambridge University Press.
- McDonnell, T.E. 2010. Cultural objects as objects: materiality, urban space, and the interpretation of AIDS campaigns in Accra, Ghana. *American Journal of Sociology*, 115: 1800-1852.
- Meunier, D., Lambotte, F., & Choukah, S. 2013. Du bricolage au rhizome: comment rendre compte de l'hétérogénéité de la pratique Scientifique en sciences sociales? *Question de communication*, 23(1): 345-366.
- Meyer, A.D. 1982. Adapting to environmental jolts. *Administrative Science Quarterly*, 27(4): 515-538.
- Meyer, J.W. 1996. Otherhood: the transmission of ideas in the modern organizational environment. In B. Czarniawska & G. Sevón (Eds.), *Translating Organizational Change*: 241-252. Berlin: Walter de Gruyter.
- Meyer, J.W., Drori, G.S., & Hwang, H. World society and the proliferation of formal organization. In G.S. Drori, J.W. Meyer & H. Hwang (Eds.), *Globalization and organization: world society and organizational change*: 25-49. New York: Oxford University Press.
- Meyer, J.W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, vol. 83, 340-363.
- Meyer, J.W., & Scott, W.R. 1983a. Centralization and the legitimacy problems of local governments. In J.W. Meyer & W.R. Scott (Eds.), *Organizational Environments: ritual and rationality*: 99-215. Beverly Hills, CA: Sage.
- . 1983b. with the assistance of Brian Rowan and Terrence E. Deal. *Organizational Environments: ritual and rationality*. Beverly Hills, CA: Sage.
- Meyer, R. 2006. Visiting relatives: current developments in the new sociology of knowledge. *Organization*, 13(5): 725-738.
- Miles, M.B., & Huberman, M.A. 1994. *Qualitative data analysis: an expanded sourcebook* (2nd Edition). Thousand Oaks, CA: Sage Publications.
- Miner, A.S., Bassoff, P., & Moorman, C. 2001. Organizational Improvisation and Learning: a field study. *Administrative Science Quarterly*, 46(2): 304-337.
- Minguet, G., & Osty, F. 2010. L'activité de conception comme bricolage: entre la rationalisation industrielle et l'exploration des possibles. In F. Odin & C. Thuderoz (Eds.), *Des mondes bricolés? Arts et sciences à l'épreuve de la notion de bricolage*: 237-251. Metis Lyon Tech: PPUR.
- Mishina, Y., Pollock, T.G., & Porac, J.F. 2004. Are more resources always better for growth? Resource stickiness in market and product expansion. *Strategic Management Journal*, 25: 1179-1197.
- Mizruchi, M., & Fein, L. 1999. The social construction of organizational knowledge: a study of the uses of coercive, mimetic and normative isomorphism. *Administrative Science Quarterly*, 44(4): 653-683.
- Moe, T.M. 1990. Political Institutions: the neglected side of the story. *Journal of Law, Economics and Organizations*, 6: 213-253.
- Monteiro, P., & Nicolini, D. 2014. Recovering materiality in institutional work: prizes as an assemblage of human of material entities. *Journal of Management Inquiry*: 1-21.
- Moscovici, S. 1989. Des représentations collectives aux représentations sociales: elements pour une histoire. In D. Jodelet (Ed.), *Les représentations sociales*: 79-103. Paris: PUF.
- Myers, M.D. 2009. *Qualitative research in business and management*. London, UK: Sage Publications.
- Newman, H.K. 2001. Historic preservation policy and regime politics in Atlanta. *Journal of Urban Affairs*, 23(1): 71-86.
- Nicolini, D. 2012. *Practice theory, work and organization: an introduction*. Oxford, UK: Oxford University Press.

- Nicolini, D., Mengis, J., & Swan, J. 2012. Understanding the role of objects in cross-disciplinary collaboration. *Organization Science*, 23: 612-629.
- Nisbett, R.E. 2003. *The geography of thought*. New York: Free Press.
- Nonaka, I., & Konno, N. 1998. The concept of "ba": building a foundation for knowledge creation. *California Management Review*, 40: 40-54.
- Norberg-Schulz, C. 1980. *Genius Loci. Towards a phenomenology of architecture*. New York: Rizzoli International Publications.
- North, D.C. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge UK: Cambridge University Press.
- . 1991. Institutions. *The Journal of Economic Perspectives*, 5(1): 97-112.
- Odin, F., & Thuderoz, C. 2010. *Des mondes bricolés? Arts et sciences à l'épreuve de la notion de bricolage*. Metis Lyon Tech: PPUR.
- Olesen, C. 2009. *Genius Loci for architectural developers & advisors*. Denmark: Gentofte Kommune professional Memo.
- Olin, M. 1992. *Forms of representations in Alois Riegl's theory of Art*. Pennsylvania: Penn State Press.
- Oliver, C. 1991. Strategic responses to institutional processes. *Academy of Management Review*, 16: 145-179.
- . 1992. The antecedents of deinstitutionalization. *Organization Studies*, 13: 563-588.
- Oliver, C., & McKague, K. 2009. Sustainable local enterprise networks: network bricolage as institutional entrepreneurship in low-income economies. Paper presented at the Institutional Theory Conference, University of Alberta, Edmonton, June.
- Olsen, B. 2013. Reclaiming Thing: an archaeology of Matter. In P.R. Carlile, D. Nicolini, A. Langley & H. Tsoukas (Eds.), *How Matter Matters: objects, artifacts and materiality in organization studies*: 171-196. Oxford: Oxford University Press.
- Orlikowski, W. 1992. The duality of technology: rethinking the concept of technology in organizations. *Organization Science*, 3: 398-427.
- . 2000. Using technology and constituting structures: a practice lens for studying technology in organizations. *Organization Science*, 11: 404-428.
- . 2006. Material knowing: the scaffolding of human knowledgeability. *European Journal of Information Systems*, 15: 460-466.
- Orlikowski, W., & Scott, S. 2008. Sociomateriality: challenging the separation of technology, work and organization. *The Academy of Management Annals*, 2: 433-474.
- Orpana, S. 2012. Simulacra of social desire: reflection on collecting and the "lost toy archive", *SPECS Journal of Art and Culture*, 3: 211-237.
- Oswalt, W.H. 1973. *Habitat and Technology: the evolution of hunting*. New York: Holt, Rinehart, and Winston Inc.
- Owen-Smith, J., & Powell, W.W. 2008. Networks and institutions. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 596-623. London, UK: Sage Publications Ltd.
- Parsons, T. 1960. Some Ingredients of a general theory of formal organization. In T. Parsons (Eds.), *Structure and Process in Modern Societies*: 59-96. Glencoe, IL: Free Press.
- Patriotta, G., Gond, J.P., & Schultz, F. 2011. Controversies, orders of worth, and public justifications. *Journal of Management Studies*, 48(8): 1804-1836.
- Pêcheur, J. 2014. *Bain de jouvence pour Molitor*. M le magazine du Monde, May 2nd 2014.
- Pels, D., Hetherington, K. & Vandenberghe, F. 2002. The status of the object performances, mediations, and techniques. *Theory, Culture & Society*, 19(5-6): 1-21.
- Penna, M.D., & Cuhna, A. 1994. On Authenticity. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 261-264. Japan: UNESCO World Heritage Centre & ICOMOS.
- Penrose, E.T. 1959. *The theory of the growth of the firm*. New York: John Wiley.

- Pentland, D., & Feldman, M. 2005. Organizational routines as a unit of analysis. *Industrial and Corporate Change*, 14(5): 793-815.
- Perkmann, M., & Spicer, A. 2014. How organizations take form: the role of imprinting and values in Organizational Bricolage, *Organization Science*, Articles in Advance: 1-22.
- Pérouse de Montclos, J.-M. 1972. *Architecture, description et vocabulaire méthodique*. Paris: Éditions du Patrimoine / CMN.
- Peterson, R.A. 1999. *Creating country music: fabricating authenticity*. Chicago: University of Chicago Press.
- Petroski, H. 1992. The Evolution of Artifacts. *American Scientist*, 80: 416-420.
- Phillips, N., & Malhotra, N. 2008. Taking social construction seriously: extending the discursive approach in institutional theory. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 702-721. London, UK: Sage Publications Ltd.
- Phillips, N., & Tracey, P. 2007. Opportunity recognition, entrepreneurial capabilities and bricolage: connecting institutional theory and entrepreneurship, *Strategic Organization*, 5(3): 313-320.
- Piaget, J. 1937. *La construction du réel chez l'enfant*. Paris: Delachaux et Niestlé.
- Pierides, D., & Woodman, D. 2012. Object-oriented sociology and organizing in the face of emergency: Bruno Latour, Graham Harman and the material turn. *The British Journal of Sociology*, 23(4): 662-679.
- Pinch, T. 2008. Technology and institutions: living in a material world. *Theory and Society*, 37(5): 461-483.
- Pinch, T. & Swedberg, R. 2008. Introduction. In T. Pinch & R. Swedberg (Eds.), *Living in a material world: economic sociology meets science and technology studies*: 1-26. Cambridge, MA: The MIT Press.
- Polanyi, M. 1966. *The Tacit Dimension*. London, UK: Routledge & Kegan Paul.
- Pomian, K. 2003. *Des Saintes Reliques à l'art moderne, Venise-Chicago, XIIIe-XXe siècle*. Paris: Gallimard.
- Powell, W.W., & Colyvas, J.A. 2008. Microfoundations of institutional theory. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 276-298. London, UK: Sage Publications Ltd.
- Pratt, M.G. 2000. The good, the bad, and the ambivalent: managing identification among Amway distributors. *Administrative Science Quarterly*, 45: 456-493.
- Proust, M. 1904. La mort des cathédrales. In M. Proust (Ed.) *Pastiches et Mélanges* (1971). Paris: Gallimard / La Pléiade.
- Quinet, E. 1883. *Viollet-le-Duc: Les églises de Paris*. Paris: C. Marpon & E. Flammarion.
- Quinn-Trank, C. & Washington, M. 2009. Maintaining an institution in a contested organizational field: the work of the AACSB and its constituents, In T.B. Lawrence, R. Suddaby & B. Leca (Eds.), *Institutional work: actors and agency in institutional studies of organizations*: 236-261. Cambridge, UK: Cambridge University Press.
- Radjou, N., Prabhu, J., Ahuja, S., & Boillot, J.J. 2013. *Innovation Jugaad. Redevenons ingénieurs!* Paris: Éditions Diatino.
- Rafaeli, A., & Pratt, M.G. 2006. *Artifacts and organizations: beyond mere symbolism*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Rafaeli, A. & Vilnai-Yavetz, I. 2004. Emotion as connection of physical artifacts and organizations. *Organization Science*, 15: 671-686.
- Rajagopalan, M. 2012. Preservation and modernity: competing perspectives, contested histories and the question of authenticity. In C.G. Crysler, S. Cairns & H. Heynen (Eds.), *The SAGE Handbook of Architectural Theory*: 308-325. London: Sage Publications.

- Rao, H., Davis, G.F., & Ward, A. 2000. Embeddedness, social identity and mobility: why firms leave the NASDAQ and join the New York Stock Exchange. *Administrative Science Quarterly*, 45(2): 268-292.
- Rao, H., Monin, P., & Durand, R. 2003. Institutional change in Toque Ville: Nouvelle Cuisine as an identity movement in French Gastronomy, *American Journal of Sociology*. 108(4): 795-843.
- . 2005. Border crossing: bricolage and the erosion of categorical boundaries in French gastronomy. *American Sociological Review*, 70(6): 968-991.
- Rathmann, K. 1998. *Sustainable architecture module: Recycling and reuse of building materials*. Ann Arbor, MI: National Pollution Prevention Center for Higher Education.
- Raviola, E., & Norbäck, M. 2013. Bringing technology and meaning into institutional work: making news at an Italian business newspaper. *Organization Studies*, 34: 1171-1194.
- Ray, J.L., & Smith, A.D. 2012. Using photographs to research organizations: evidence, considerations, and applications in a field study. *Organizational Research Methods*, 15(2): 288-315.
- Reason, P., & Marshall, J. 1987. Research as personal process. In D. Boud & V. Griffin (Eds.), *Appreciating Adults Learning: from the learner's perspective*: 112-125. London, UK: Kogan Page.
- Reay, T. & Hinings, C.R. 2009. Managing the rivalry of competing institutional logics. *Organization Studies*, 30(6): 629:652.
- Rédaction de France Info. 2015. Le château de Versailles pourrait bientôt abriter un hôtel. August 17th.
- Reddy, M. 1979. The conduit metaphor. In A. Ortney (Eds.), *Metaphor and Thought*: 284-324. New York: Cambridge University Press.
- Redding, S.G. 1990. *The Spirit of Chinese Capitalism*. New York: Walter de Gruyter.
- Reinharz, S. 1992. *Feminist method in social research*. New York: Oxford University Press.
- Rico, G.L. 1983. *Writing the natural way: using right-brain techniques to release your expressive powers*. Los Angeles: J.P. Tarcher.
- Riegl, A. 1903. *Le culte moderne des monuments: son essence et sa genèse* (2001). Paris: Seuil.
- Robin, C. 2003. Conrad et Marcel Schlumberger: une aventure industrielle originale. *Bulletin de la Sabix*, 34: 5-14.
- Roland, G. 2004. Understanding institutional change: fast-moving- and slow-moving institutions. *Studies in Comparative International Development*, 4: 109-131.
- Roosth, S., & Silbe, S. 2009. Science and technology studies: from controversies to posthumanist social theory. In B.S. Turner (Eds.), *The new Blackwell companion to social theory*: 451-473. Oxford, UK: Blackwell-Wiley.
- Rorty, R. 1967. *The linguistic turn: recent essays in philosophical method*. Chicago: University of Chicago Press.
- Roubaudi, L., & Jorion, T. 2014. *Molitor: ceci n'est pas une piscine*. Paris: Archibooks.
- Rouillard, D. 2006. *Architectures contemporaines et monuments historiques: guide des réalisations en France depuis 1980*. Paris: Éditions Le Moniteur.
- Rouleau, L. 2007. *Théories des organisations: approches classiques, contemporaines et de l'avant-garde*. Québec: Presses de l'Université du Québec.
- Rowland, N.J., & Rojas, F. 2006. Bringing technology back in: a critique of the institutionalist perspective on museums. *Museum and Society*, 4(2): 84-95.
- Rubin, H.J., & Rubin, I. 1995. *Qualitative interviewing: the art of hearing data*. London, UK: Sage Publications.
- Ruef, M. & Scott, W.R. 1998. A multidimensional model of organizational legitimacy: hospital survival in changing institutional environments. *Administrative Science Quarterly*, 43: 877-904.

- Rüling, C.C., & Duymedjian, R. 2014. Digital bricolage: resources and coordination in the production of digital visual effects. *Technological Forecasting and Social Change*, 83: 98-110.
- Ruskin, J. 1849. *The Seven Lamps of Architecture*. London, UK: Smith, Elder, and Co.
- Sahlin-Andersson, K. 1996. Imitating by editing success: the construction of organizational fields. In B. Czarniawska & G. Sevón (Eds.), *Translating organization change*: 69-92. Berlin: Walter de Gruyter.
- . 2001. National international and translational constructions of new public management. In T. Christensen & P. Laegreid (Eds.), *New public management: the transformation of ideas and practices*. Aldershot: Ashgate.
- Sahlin-Andersson, K., & Engwall, L. 2002. *The expansion of management knowledge: carriers, flows and sources*. Stanford, CA: Stanford University Press.
- Sahlin, K., & Wedlin, L. 2008. Circulating ideas: imitation, translation and editing. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism*: 218-242. London, UK: Sage Publications Ltd.
- Schatzki, T. 2002. *The site of the social*. University Park, PA: Penn State University Press.
- Schneiberg, M. 2007. What's on the path? Path dependence, organizational diversity and the problem of institutional change in the U.S. economy, 1900-1950. *Socio-Economic Review*, 5: 47-80.
- Schneider, D. 1976. Notes toward a theory of culture. In K.M. Basso & H.L. Silby (Eds.), *Meaning in Anthropology*: 197-220. Albuquerque: University of New Mexico Press.
- Schön, D.A., & Rein, M. 1994. *Frame reflection: toward the resolution of intractable policy controversies*. New York: Basic Books.
- Schön, D.A., & Wiggins, G. 1992. Kinds of seeing and their function in designing. *Design Studies*, 13: 135-156.
- Scott, W.R. 1981. *Organizations: rational, natural and open systems*. Englewood Cliffs, N.J. : Prentice-Hall.
- . 1995. *Institutions and Organization. Ideas, Interests and Identities*. (First Edition). Thousand Oaks, CA: Sage.
- . 2003. Institutional carriers: reviewing modes of transporting ideas over time and space and considering their consequences. *Industrial and Corporate Change*, 12(4): 879-894.
- . 2008a. Approaching adulthood: the maturing of institutional theory. *Theory and Society*, 37: 427-442.
- . 2008b. Lords of the Dance: professionals as Institutional Agents. *Organization Studies*, 29(2): 219-238.
- . 2010. Reflections: the past and future of research on institutions and institutional change. *Journal of Change Management*, 10(1): 5-21.
- . 2013. *Institutions and Organization. Ideas, Interests and Identities*. (Fourth Edition). Thousand Oaks, CA: Sage.
- . 2014. Unplugged – My own book review: W. Richard Scott (1995), *Institutions and Organizations. Ideas, Interests and Identities*. *M@n@gement*, 17(2): 136-140.
- Selznick, P. 1949. *TVA and the Grass Roots*. Berkeley, CA: University of California Press.
- . 1996. Institutionalism "old" and "new". *Administrative Science Quarterly*, 41: 270-277.
- Senyard, J., Baker, T., Steffens, P., & Davidsson, P. 2013. Bricolage as a path to innovativeness for resource-constrained new firms. *Journal of Product Innovation Management*, 31(2), 211-230.
- Seo, M., & Creed, W.E.D. 2002. Institutional contradictions, praxis, and institutional change: a dialectical perspective. *Academy of Management Review*, 27: 222-247.
- Sevón, G. 1996. Organizational imitation in identity transformations. In B. Czarniawska & G. Sevón (Eds.), *Translating Organizational Change*: 49-67. Berlin: Walter de Gruyter.

- Sewell, W.H., Jr. 1992. A theory of structure: duality, agency, and transformation. *American Journal of Sociology*, 98: 1-29.
- Siemsen, J. 1997. *Sølvgades Skole 150 år i 1997: tekster og billeder omkring skolen der aldrig gi'r op – især fra de sidste 50 år*. København : Sølvgades Skole Publications.
- Silverman, D. 2001. *Interpreting qualitative data: methods for analysing talk, text, and interaction* (3rd Edition). London, UK: Sage Publications.
- Simon, H. A. 1997. *Administrative behavior*. (4th Edition). New York: Free Press.
- Simons, P. 1987. *Parts. A study of ontology*. Oxford: Clarendon Press.
- Sine, W.D., & David, R.J. 2003 Environmental jolts, institutional change, and the creation of entrepreneurial opportunity in the U.S. electric power industry. *Research Policy*, 32: 185-207.
- Sire, M.A. 2005. *La France du Patrimoine: les choix de la mémoire*. Paris: Gallimard & Éditions du Patrimoine.
- Skriver, P.E. 1957. Munkegårdsskolen, *Arkitektur DK*, 1: 1-11.
- Slager, R., Gond, J.P., & Moon, J. 2012. Standardization as institutional work: the regulatory power of a responsible investment standard. *Organization Studies*, 33(5-6): 763-790.
- Smith, D.J., & Blundel, R.K. .2014. Improvisation and entrepreneurial bricolage versus rationalisation: a case-based analysis of contrasting responses to economics instability in the UK brass musical instruments industry. *Journal of General Management*, 40(1): 53-78.
- Snow, D.A., Rochford, E.B. Jr., Worden, S.K., & Benford, R.D. 1986. Frame alignment processes, micromobilization, and movement participation. *American Sociological Review*, 51: 464-481.
- Sood, S.C., & Pattinson, H.M. 2006. Urban renewal in Asia-Pacific: A comparative analysis of brainports for Sydney and Kuala Lumpur. *Journal of Business Research*, 59: 701-708.
- Stark, D. 1996. Recombinant property in eastern European capitalism. *American Journal of Sociology*, 101: 993-1027.
- Steinmo, S., Thelen, K., & Longstreth, F. 1992. *Structuring Politics: historical institutionalism in comparative analysis*. Cambridge: Cambridge University Press.
- Stevenson, H.H., & Jarillo, J.-C. 1990. A paradigm of entrepreneurship: entrepreneurial management. *Strategic Management Journal*, 11: 17-27.
- Stinchcombe, A.L. 1965. Social structure and organizations. In J.G. March (Eds.), *Handbook of Organizations*: 142-193. Chicago: Rand McNally.
- . 1968. *Construction Social Theories*. Chicago: University of Chicago Press.
- . 1997. On the virtues of the old institutionalism. *Annual Review of Sociology*, 23: 1-18.
- Stinchfield, B.T., Nelson, R.E., & Wood, M.S. 2013. Learning from Lévi-Strauss' legacy: art, craft, engineering, bricolage, and brokerage in entrepreneurship. *Entrepreneurship theory and practice*, 37(4): 889-921.
- Strandgaard Pedersen, J., & Dobbin, F. 2006. In search of identity and legitimation – Bridging organizational culture and neoinstitutionalism. *American Behavioral Scientist*, 49(7): 897-907.
- Strang, D., & Sine, W.D. 2002. Interorganizational institution. In J.A.C. Baum (Eds.), *The Blackwell Companion to Organizations*: 497-519. Oxford, UK: Blackwell.
- Strang, D., & Soule, S.A. 1998. Diffusion in organizations and social movements: from hybrid corn to poison pills. *Annual Review of Sociology*, 24: 265-290.
- Strauss, A.L. 1987. *Qualitative analysis for social scientists*. New York: Cambridge University Press.
- Strauss, A.L., & Corbin, J. 1990. *Basics of qualitative research methods: techniques and procedures for developing grounded theory* (1st Edition). Thousand Oaks, CA: Sage Publications.
- . 1998. *Basics of qualitative research methods: techniques and procedures for developing grounded theory* (2nd Edition). Thousand Oaks, CA: Sage Publications.

- Stern, P.N. 1994. Eroding grounded theory. In J. Morse (Ed.), *Critical issues in qualitative research methods*: 212-223. Thousand Oaks, CA: Sage Publications.
- Stovel, H. 1994. Considerations in framing the authenticity question for conservation. In K.E. Larsen (Ed.), *Nara Conference on Authenticity, Japan 1994, Proceedings*: 393-398. Japan: UNESCO World Heritage Centre & ICOMOS
- Suárez, D. 2007. Education professionals and the construction of human rights education. *Comparative Education Review*, 51(3): 329-352.
- Suárez, D., & Bromley, P. forthcoming. Institutional theories and levels of analysis: history, diffusion and translation. In J. Schriewer (Ed.), *World culture re-contextualised*. Routledge/Taylor and Francis.
- Suchman, M.C. 1995. Managing legitimacy: strategic and institutional approaches. *Academy of Management Review*, 20: 571-610.
- . 2003. The contract as social artifact. *Law & Society Review*, 37: 91-142.
- Suchman, M.C., & Edelman, L.G. 1997. Legal rational myths: the new institutionalism and the law and society tradition. *Law and Social Inquiry*, 21: 903-941.
- Suddaby, R. 2006. What grounded theory is not. *Academy of Management Journal*, 49: 633-642.
- Sullivan, L. 1896. The Tall Office Building Artistically Considered. *Lippincott's Monthly Magazine*, March.
- Tanizaki, J. 1978. *Éloge de l'ombre*. Paris: Verdier.
- Taylor, C. 1991. *The ethics of authenticity*. Cambridge, MA: Harvard University Press.
- Thomasson, A. 2007. Artifacts and Human concepts. In E. Margolis & S. Laurence (Eds.), *Creations of the Mind. Theories of Artifacts and their representation*: 52-73. Oxford and New York: Oxford University Press.
- Thorne, S., Jensen, L., Kearney, M.H., Noblit, G., & Sandelowski, M. 2004. Qualitative metasynthesis: reflections on methodological orientation and ideological agenda. *Qualitative Health Research*, 14(10): 1342-1365.
- Tolbert, P.S., & Zucker, L.G. 1983. Institutional sources of change in the formal structure of organizations: the diffusion of civil service reforms 1880-1935. *Administrative Science Quarterly*, 23: 22-39.
- . 1996. The institutionalization of the institutional theory. In S.R. Clegg, C. Hardy & W.R. Nord (Eds.), *The Sage Handbook of Organization Studies*: 175-190. London: Sage Publications Ltd.
- Tornikoski, E.T., & Newbert, S.L. 2007. Exploring the determinants of organizational emergence: a legitimacy perspective. *Journal of Business Venturing*, 22: 311-335.
- Trevino, L.J., Thomas, D.E., & Cullen, J. 2008. The three pillars of institutional theory and FDI in Latin America: an institutionalization process. *International Business Review*, 17(1): 118-133.
- Van de Ven, A. 2007. *Engaged scholarship*. New York: Oxford University Press.
- Venkatraman, M., & Nelson, T. 2008. From servicescape to consumptionscape: a photo-elicitation study of Starbucks in the New China. *Journal of International Business Studies*, 39: 1010-1026.
- Vian, B. 1947. *L'Écume des jours*. Paris: Gallimard.
- Vilatte, J.-C. 2007. Audioguides et musées. Paper presented at Formation "Évaluation", Castres.
- Vince, R., & Warren, S. 2012. Participatory visual methods. In C. Cassell & G. Symon (Eds.), *The practice of qualitative organizational research: core methods and current challenges*: 275-295. London, UK : Sage Publications.
- Viollet-le-Duc, E. 1854-1868. *Entretiens sur l'Architecture*. Collection Archigraphy. Suisse: Infolio.
- Walker, L., & Elbé, V. 2011. Préface. In V.Elbé & L. Walker (Eds.), *Reconvertir le Patrimoine*: 5. Paris: Éditions Lieux Dits.
- Wallon, H. 1903. Centenaire de l'élection de Quatremère de Quincy à l'Institut, classe d'histoire et de littérature ancienne, le 16 février 1804. Notice supplémentaire sur sa vie et ses travaux.

- Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 47(6): 538-580.
- Weber, M. 1968. *Economy and Society: an interpretive Sociology*. Berkeley: University of California Press.
- Wedlin, L. 2007. The role of rankings in codifying a business school template: classifications, diffusion and mediated isomorphism in organizational fields. *European Management Review*, 4: 24-39.
- Weick, K.E. 1979. *The Social Psychology of Organizing*. (2nd Edition). Reading, MA: Addison-Wesley.
- . 1991. The aesthetic of imperfection in orchestras and organizations. In K.E. Kamoche, M. Pina Cuhna & J. Cunha (Eds.), *Organizational improvisation*: 163-180. London, UK: Routledge.
- . 1993. The collapse of sensemaking in organization: the Mann Gulch disaster. *Administrative Science Quarterly*, 38: 628-652.
- . 1995. *Sensemaking in Organizations*. Thousand Oaks, CA: Sage.
- . 1998. Improvisation as a mindset for organizational analysis. *Organization Science*, 9(5): 543-555.
- Werner, M.D., & Cornelissen, J.P. 2014. Framing the change: switching and blending frames and their role in instigating institutional change. *Organization Studies*, 35(10): 1449-1472.
- Westenholz, A. Strandgaard Pedersen, J., & Dobbin, F. 2006. Institutions in the making: identity, power and the emergence of new organizational forms. *American Behavioral Scientist*, 49: 889-896.
- Wiener, C.L. 2007. Making teams work in conduction grounded theory. In A. Bryant & K. Charmaz (Eds.), *Handbook of grounded theory*: 293-310. London, UK: Sage Publications.
- Wijen, F., & Ansari, S. 2007. Overcoming inaction through collective institutional entrepreneurship: insights from regime theory. *Organization Studies*, 28: 1079-1100.
- Williamson, O.E. 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
- Woodmansee, M. 1992. On the author effect: recovering collectively. *Cardozo Arts and Entertainment Law Journal*, 10: 279-292.
- Yaneva, A. 2005. Scaling up and down: extraction trials in architectural design. *Social Studies of Science*, 35(6): 867-894.
- Yanov, D. 2006. Studying physical artifacts: an interpretive approach. In A. Rafaeli & M.G. Pratt (Eds.), *Artifacts and organizations: beyond mere symbolism*: 41-60. Mahwah, NJ: Lawrence Erlbaum Associates.
- Yin, R.K. 2013. *Case study research: design and methods* (5th Edition). London, UK: Sage Publications.
- Yiu, D., & Makino, S. 2002. The choice between joint venture and wholly owned subsidiary: an institutional perspective. *Organization Science*, 13: 667-683.
- Zald, M.N. 1996. Culture, ideology and strategic framing. In D. McAdam, J.D. McCarthy & M.N. Zald (Eds.), *Comparative perspectives on social movements*: 261-274. Cambridge, UK: Cambridge University Press.
- Zahra, S.E., Gedajlovic, E., & Neubaum, D.O., & Shulman, J.M. 2009. A typology of social entrepreneurs: motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5): 519-532.
- Zilber, T.B. 2008. The work of meanings in institutional processes and thinking. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The Sage Handbook of Organizational Institutionalism* 151-169. London, UK: Sage Publications Ltd.
- . 2011. Institutional multiplicity in practice: a tale of two high-tech conferences in Israel. *Organization Science*, 22(6): 1539-1559.
- Zucker, L.G. 1977. The role of institutionalization in cultural persistence. *American Sociological Review*, 42: 726-743.

———. 1987. Institutional Theories of Organization. *Annual Review of Sociology*, 13(1): 443-464.

Others documents

A/Concept. 2014. *Schlumberger Lecture Hall intervention works – Building program*. France.

Arkitema K/S. 2010. *Nyboder: Restaurering og fornyelse – Building Program*. Denmark.

Building Regulations, 2010. BR10. Denmark: The Danish Ministry of Economic and Business Affairs.

C.F. Møller Architects. 2012. *Solvgades Skole – Building Program*. Denmark.

CMN. 2012. *Le Panthéon Français: rapport de présentation – Building Program*. France.

Connaissance des Arts. *L'Hôtel de la Marine – Hors-Série*. Paris: SFPA.

Gentofte Municipality. 2013. Munkegaardsskolen: 1949 – 2013. *Municipal school restored and revitalized*. Denmark: Self-publication.

ICOMOS. 1931. *Athens Charter*.

ICOMOS. 1964. *Venice Charter*.

ICOMOS. 1981. *Burra Charter*.

Journaux Officiels. 2014/2015. *Code du Patrimoine*. Paris: Documentation Française.

Kulturstyrelsen. 2003. *Referat 19/11-2003*.

Kulturstyrelsen. 2005. *Referat 21/04-2005*.

Kulturstyrelsen. 2005. *Referat 19/05-2005*.

Kulturstyrelsen. 2006. *Referat 15/06-2006*.

Loi Grenelle 1, 2012. RT2012. France: Ministère de l'écologie, du développement durable et de l'énergie.

Maisons Paysannes de France. 2013. *The Plaisir Church renovation*. Plaisir: Self-publication.

Møller P.S., 2011. *Promulgation of the Act on Listed Buildings and Preservation of Buildings and Urban Environments*. Denmark: Ministry of Culture.

Rapport Philippon. 2005. *Piscine Molitor*. Paris.

Realdania. 2010. *Modelprogram for Folkeskoler*. Denmark: Realdania.

Realdania. 2012. *2050: something's green in the State of Denmark*. Denmark: Realdania and Monday Morning.

LIST OF ACRONYMS

BCH = Board of Cultural Heritage

BR10 = Danish 2010 Building Regulations

CMN = Centre of National Monuments

CNMH = National Commission of Historical Monuments

CPO = Cultural Public Office

CRMH = Regional Office of Historical Monuments Curator

DALBPBUE = Danish Act on Listed Buildings and Preservation of Buildings and Urban
Environments

DGP = Direction Générale des Patrimoines

DIY = Do It Yourself

DKK = Danish Krone

DRAC = Regional Office of Cultural Affairs

FYI = For Your Information

GMT = Grounded-Theory Methodology

ICOMOS = International Council on Monuments and Sites

ITC = Information and Communications Technology

LBI = Listed-Buildings Institution

LRMH = Laboratory for Research on Historical Monuments

MOOC = Massive Open Online Courses

NI = Neo-Institutionalism

OS = Organisational Studies

RT2012 = 2012 French Thermal Rules

SCANCOR = Scandinavian Consortium for Organizational Research

SCI = Scandinavian Institutionalism

UNESCO = United Nations Educational, Scientific and Cultural Organization

VC = Venice Charter

LIST OF FIGURES, TABLES & PICTURES

Figure 1. The thesis' anatomy.....	44
Figure 2. A pictured theoretical framework.....	84
Figure 3. The data structure.....	127
Figure 4. From the institution interpretation to the collective action.....	132
Figure 5. The two-level dialogue of collective bricolage.....	133
Figure 6. The three steps of listed building's construction works.....	135
Figure 7. The steps of the preproject.....	139
Figure 8. The steps of the project.....	142
Figure 9. The steps of the construction.....	144
Figure 10. The interpretative frame design.....	172
Figure 11. The balance to fit the frame.....	197
Figure 12. The intertwined selection criteria.....	219
Figure 13. The instantiation construction process: a process of collective bricolage	238
Table 1. The three pillars of institutions (Scott, 2013: 60).....	50
Table 2. The institutional carriers (Scott, 2013: 96).....	58
Table 3. The different types of "resources at hand" in bricolage within OS.....	76
Table 4. My constructivist stance (from Charmaz, 2014: 320).....	95
Table 5. The type of the selected buildings (from Flyvbjerg, 2006: 230).....	104
Table 6. List of Interviews.....	119
Table 7. Tests and compromises.....	198
Picture 1. Nyboder in three pictures.....	105
Picture 2. Sølvgade Skole in three pictures.....	107
Picture 3. Munkegård Skole in three pictures.....	109
Picture 4. The French Pantheon in three pictures.....	111
Picture 5. The École des Mines in three pictures.....	113
Picture 6. Molitor in three pictures.....	114
Picture 7. Re-using surrounding colours and morphology.....	190
Picture 8. Old and New Nyboder doors.....	191
Picture 9. Mimicrying the courtyards.....	192
Picture 10. The Assembly Hall & Furniture.....	193
Picture 11. Renovating the Schlumberger Lecture Hall.....	194
Picture 12. The invisible new materials in French Pantheon.....	195
Picture 13. The Molitor homage to Street-Art.....	196

FRENCH RESUME

Instancier grâce au bricolage collectif: les cas de l'Institution des Bâtiments Protégés

Sous le spectre de la théorie néo-institutionnelle, la présente thèse propose d'étudier la tangible modification d'un objet matériel par des acteurs, dont le but est cependant de maintenir sa légitimité institutionnelle. Plus spécifiquement, nous essayons dans le manuscrit d'expliquer une des dynamiques reliant l'acteur, l'artéfact et l'institution à travers le bricolage collectif selon un modèle que nous appelons ici le processus de construction de l'instanciation. Le but de la recherche est donc de comprendre comment les acteurs modifient une instanciation tout en continuant de véhiculer l'institution qui la circonscrit.

De quoi est-il question dans ce manuscrit ?

Une étude alternative de l'instanciation

D'une façon générale, un artéfact peut véhiculer une institution (Blanc & Huault, 2014). Dit différemment, les acteurs peuvent transformer et manipuler des objets matériels pour refléter et former « les éléments [piliers] culturo-cognitifs, normatifs et régulatifs qui procurent à l'ordre social stabilité et sens » (Scott, 2008 : 222). Car il représente la culture, les valeurs et les symboles associés à une institution particulière et parce qu'il peut être infusé avec de nouveaux éléments institutionnels, un tel artéfact est dénommé instanciation (Hilpinen, 2011).

Les études sur l'instanciation se sont multipliées au cours des dernières années (*cf.* Dover & Lawrence, 2010 ; Carlile, Nicolini, Langley & Tsoukas, 2013 ; Jones, Boxenbaum & Anthony, 2013). Cependant, ces études se concentrent seulement sur les conséquences institutionnelles liées à leur modification. En effet, les chercheurs essaient principalement de combler le vide théorique qui existe « entre les études des objets et les aspects conceptuels de l'institutionnalisation » (Zilber, 2008: 164) et de « comprendre le rôle de

la matérialité ainsi que sa relation avec l'agence » (Wijen & Ansari, 2007 cités dans Jones & Massa, 2013 : 1126).

Au regard de sa considération croissante dans le secteur académique, la théorie néo-institutionnelle met en exergue les divers et principaux rôles qu'une instanciation peut avoir dans le cadre de processus institutionnels (Jones & Massa, 2013) et dans quelle mesure les acteurs utilisent des artéfacts « instanciant des institutions établies pour faciliter la transition entre les pratiques passées et l'élaboration de nouvelles pour le futur (Gawer & Philipps, 2013, cités dans Lawrence, Leca & Zilber, 2013 : 1028).

Au delà de son important rôle institutionnel comme moyen de véhiculer et de diffuser l'institution (Scott, 2003), une instanciation a d'autres intérêts institutionnels. Le premier de ces rôles additionnels est de transporter une connaissance tacite ou une mémoire collective et de refléter matériellement le produit de l'action humaine (Gagliardi, 1990). L'instanciation permet l'agence mais aussi personnifie les valeurs culturelles que certains acteurs tentent de communiquer pour permettre à d'autres de comprendre l'institution véhiculée (Rafaeli & Pratt, 2006) : e.g. l'utilisation des bâtiments dans Berg et Kreiner (1990).

De plus, les instanciations sont utilisées pour répondre à des nouvelles pratiques ou secousses qui peuvent déstabiliser l'ordre institutionnel existant, par exemple dans le cas où des acteurs échouent « à reproduire des actions légitimées ou prises-pour-acquises » (Lawrence & Suddaby, 2006 : 217).

De façon réciproque, parce qu'une instanciation est composée d'une multitude d'objets physiques (Jones et al., 2013), l'addition de nouveaux éléments matériels peut altérer le sens d'une instanciation (McDonnell, 2010) et donc mettre en péril sa légitimité institutionnelle. Dans la même veine que Pinch (2008), qui a déjà exploré le rôle des objets dans la durabilité de l'institution et dans l'ancrage de sa légitimité, des études récentes avancent que la modification, ou modernisation, d'une instanciation à travers des ressources matérielles peut, sous certaines circonstances, entraîner un changement institutionnel (Patriotta, Gond & Schultz, 2012; Currie, Lockett, Finn, Martin & Waring, 2013; Raviola & Norbäck, 2013).

En outre, les actions effectuées sur une instanciation peuvent impacter l'institution (Jones & Massa, 2013). Pour cette raison, ces actions peuvent entraîner l'intégration ou la

suppression de dimensions institutionnelles symboliques (Suchman, 2003) et donc ébranler la légitimité de l'instanciation car cette dernière fait écho à l'institution. En effet, au regard de l'instanciation, la construction symbolique et cognitive s'y rattachant est *de facto* aussi importante que la construction matérielle, car « ensemble elles rendent cohérente et supportent dans le temps » l'institution (*ibid*, 2013: 1127). Ce faisant, une instanciation joue aujourd'hui plusieurs rôles dans le néo-institutionnalisme.

Cependant, concernant la modification de l'instanciation, l'analyse des chercheurs s'est principalement concentrée sur ce phénomène selon une approche bottom-up, *i.e.* à partir de l'utilisation de l'objet par les acteurs jusqu'à son impact sur l'institution. Ou dit différemment, ils ont seulement étudié comment et dans quelle mesure certains acteurs modifiaient radicalement le sens d'une instanciation et les pratiques pour le construire pour finalement s'intéresser à son institutionnalisation (Jones, Maoret, Massa & Svejenova, 2012). Les acteurs en question étant ceux qui manipulaient ces matériaux, qui eux-mêmes véhiculés des idées ou symboles institutionnels et des propriétés inhérentes. Des précédentes études analysent les conséquences institutionnelles préméditées des actions pratiquées sur l'artéfact, cependant elles ne concentrent pas leur analyse sur la transformation de l'artéfact *per se*. De façon plus intéressante, il manque dans la littérature une approche multi-niveaux – incluant les acteurs, l'institution et l'artéfact – qui pourrait mettre en avant la constitution matérielle et symbolique de l'instanciation (*cf. ibid*, 2013). Les chercheurs ont en effet délaissé la question de la construction, ou modification, d'une instanciation dans un contexte où l'institution est établie et ne doit pas être changée. Plus précisément, aucune étude sur les instanciations n'a regardé les cas où les acteurs n'avaient aucun but institutionnel si ce n'est, dans le meilleur des cas, respecter l'institution en place. Pourtant, étudier ce phénomène est important pour comprendre d'où vient le sens des ressources matérielles et comment il est possible de les mélanger de façon tangible tout en assurant la stabilité institutionnelle.

En conséquence dans le présent manuscrit, nous nous concentrons sur cette question délaissée dans le but de développer les travaux de Gieryn (2002) et de Jones et Massa (2013) qui avancèrent précédemment qu'une telle instanciation peut être simultanément appréhendée comme une construction symbolique et matérielle dans un contexte institutionnel où les acteurs, qui y évoluent, ne veulent pas ou n'essaient pas de le

modifier. Au regard de ces vides théoriques et de ce qui n'a jamais été étudié, nos contributions se concentrent sur comment de telles ressources matérielles, et leurs sens associés, sont sélectionnées collectivement pour être ensuite mélangées durant l'acte de construction d'une instanciation.

À travers l'approche constructiviste de la méthodologie dite de la théorie ancrée (Charmaz, 2014), le projet de recherche doctoral explore ce dont une organisation – ici une équipe projet dédiée à des travaux de construction – a besoin pour construire, symboliquement et matériellement, une instanciation tout en préservant sa légitimité institutionnelle. Le manuscrit apporte donc une analyse de comment les acteurs (re)construisent une instanciation selon une dynamique en deux temps où ils doivent prendre en compte aussi bien l'institution en présence que l'artéfact existant, *i.e.* le bâtiment protégé dans l'étude.

Combiner l'institutionnalisme scandinave et le bricolage

Pour mieux comprendre et expliquer le mélange entre ces deux dimensions cognitive et tangible, nous proposons une perspective alternative sur le processus de construction de l'instanciation à travers un focus sur l'agence. Pour se faire, nous enracinons notre présente étude dans l'école institutionnelle scandinave car cette dernière souligne les dynamiques de traduction, *i.e.* la transformation conceptuelle d'idées institutionnelles en pratiques et/ou en objets (Czarniawska & Joerges, 1996). Plus précisément, c'est mobiliser le concept de « cadre » qui nous apparaît comme intéressant pour la raison qu'un tel cadre cognitif aide les acteurs à interpréter les éléments venant d'un contexte institutionnel précis (Goffman, 1974). Cette littérature met en évidence les différents usages des éléments institutionnels pour définir une interprétation collective, et par extension les pratiques pertinentes associées (Boxenbaum, 2006). Néanmoins, le design à proprement parler de cette construction symbolique, qui doit être traduite dans un artéfact, demeure flou mais nécessaire. En effet, comprendre ce dont les acteurs ont besoin pour construire ce cadre permettrait de développer et d'associer les connaissances actuelles des chercheurs sur le processus de traduction des idées aux matériaux (Czarniawska & Sevón, 2005), sur les conséquences

de la matérialisation de ces idées (Beasmish & Biggart, 2012), et sur le rôle que ces artefacts ont en tant que véhicules institutionnels (Yanow, 2006; Jones et al., 2012; Monteiro & Nicolini, 2014).

En conséquence, nous proposons que la partie symbolique de la construction de l'instanciation peut mieux être appréhendée et étudiée à travers cette notion de cadre et l'exploration de ses composants institutionnels. En revanche, ce qui est toujours inconnu et totalement délaissé demeure la compréhension de comment les ressources pertinentes, *i.e.* celles qui constituent l'artéfact matérialisant le cadre institutionnel, sont sélectionnées et mélangées dans un contexte où la légitimité institutionnelle doit être respectée et donc où l'institution ne doit pas changer malgré l'intégration de nouveaux matériaux.

De facto, nous mettons l'accent sur la combinaison des éléments symboliques et matériels à travers l'existence d'une structure cognitive et nous développons donc l'institutionnalisme scandinave en intégrant les dynamiques du bricolage comme implémentées par les acteurs pour simultanément conceptualiser et construire matériellement un objet tout en mélangeant les ressources et leurs sens ; ressources qui peuvent donc à travers leur combinaison véhiculer un message institutionnel commun (Dover & Lawrence, 2010). Adapté de l'ouvrage *La Pensée Sauvage* de Claude Lévi-Strauss (1962), le bricolage est défini comme « l'action de faire en appliquant des combinaisons de ressources à disposition à des nouveaux problèmes et opportunités » (Baker & Nelson, 2005 : 333). Par extension, le bricolage collectif consiste dans le partage de tous les répertoires de ressources des acteurs via le dialogue qu'ils implémentent avec leurs ressources personnelles. En conséquence, les acteurs réalisent collectivement leur objectif commun en produisant un unique résultat qui diffère selon les ressources qu'ils ont décidé ou non d'utiliser ou ont réussi à entrelacer (Duymedjian & Rüling, 2010). Le contexte empirique, et l'obligation des acteurs à devoir faire avec le bâtiment existant mais aussi avec un nombre limité de ressources pour restreindre la perturbation du patrimoine incarné, participe aussi dans la raison du choix de la notion de Lévi-Strauss. En effet, ce dernier permet d'illustrer les mécanismes de dialogue et de prises de décision dans le cas de la sélection des ressources « sous la main » durant un bricolage collectif ; le processus de dialogue aussi bien que le processus de prise de

décision demeurant encore très faiblement étudiés par les chercheurs (*cf. ibid*, 2010; Boxenbaum & Rouleau, 2011; Perkmann & Spicer, 2014).

À travers l'étude de l'action et de l'agence, notre principale intention est donc de lier les approches de l'institutionnalisme scandinave et du bricolage collectif pour initier la théorisation robuste d'un processus de construction de l'instanciation. L'intérêt est ici d'analyser la construction symbolique et matérielle de l'instanciation en se concentrant sur quels sont les composants du cadre, comment ce cadre est-il mobilisé pour permettre un bricolage collectif, et finalement comment les ressources matérielles pertinentes sont sélectionnées.

De facto, la question de recherche qui guide cette dissertation est :

Comment les acteurs, grâce au bricolage collectif, modifient l'instanciation d'une institution établie ?

À travers l'analyse des interactions entre les acteurs et l'artéfact, la perspective de l'étude est donc de mélanger deux mécanismes ensemble : celui qui donne du sens à un artéfact à partir d'éléments institutionnels, avec celui qui permet la sélection des ressources pour construire/modifier ce même artéfact, tout en respectant ce sens donné via leurs combinaisons. Le principal but est donc de comprendre la matérialisation, *i.e.* la construction d'une instanciation et de la théoriser.

Intervenir sur des bâtiments protégés

Pour répondre à cette question, nous étudions le secteur de l'architecture patrimoniale à travers le cas de l'Institution des Bâtiments Protégés, qui inclut les bâtiments protégés, des pratiques et professions dédiées, des régulations spécifiques, etc. Plus spécifiquement, nous concentrons notre étude sur le cas des travaux d'intervention, appelés *ajustements contemporains*, comme les rénovations ou les extensions que subissent ces bâtiments (Rouillard, 2006), où les parties prenantes qui prennent part à ce projet doivent simultanément secourir l'authenticité du bâtiment et le transformer en une installation moderne tout en gardant intacte la fonction avec laquelle

ou pour laquelle le bâtiment a été construit ou a été protégé. Nous analysons comment les acteurs entrelacent l'« ancien » et le « nouveau », à la fois symboliquement et matériellement, *i.e.* comment ils respectent le patrimoine véhiculé tout en intégrant de nouveaux matériaux ou éléments ; la survie mais aussi la légitimité du bâtiment dépendant de ces travaux d'intervention (Diez, 2012).

Au regard du contexte théorique, le but de la thèse est donc de comprendre comment un artéfact « bâtiment protégé » est modifié tout en respectant l'institution établie qui le gouverne, *i.e.* sans être « déprotégé » et transformé en un artéfact banal. Et si ce challenge empirique est important, c'est parce que le patrimoine véhiculé, évalué par les acteurs à travers leur interprétation de son authenticité, est mis en péril durant ces travaux.

En effet, l'approche des travaux d'intervention au regard de cette question d'authenticité est compliquée pour plusieurs raisons. Une première raison est attachée au fait que la valeur véhiculée évolue en fonction du temps qui passe et des gens qui changent. Ensuite, certaines valeurs actuelles – comme la valeur artistique ou celle liée à la fonction qui peuvent supplanter, par exemple matériellement, la considération d'autres valeurs – méritent un traitement précis et dédié en cas de travaux d'intervention car leur considération ou non peut dénigrer ou altérer le côté commémoratif du bâtiment au regard de l'objectif de modernisation, qu'il soit par exemple l'amélioration de sa performance fonctionnelle ou juste la plus fidèle des restaurations possibles (Choay, 2009). En effet, pour construire sa valeur moderne, le passé acquiert une valeur contemporaine (Riegl, 1903). Néanmoins, le leitmotiv « le patrimoine des bâtiments protégés doit être moderne car l'intervention n'est pas effectuée pour restaurer le bâtiment dans l'état originel dans lequel il était » (Chatillon, 2015) n'est toujours pas pris pour acquis et demeure appréhendé de différentes façons.

La question de la fonction

Un tel débat ne peut pas aujourd'hui être résolu sans prendre en compte la question négligée de quoi faire avec la fonction d'un bâtiment durant une intervention (Walker & Elbé, 2011). Car les interventions ne doivent pas détruire le « jus » et

l' « essence originelle » (Olin, 1992), considérer ou non la valeur patrimoniale liée à la fonction marque l'émergence de diverses solutions pour respecter et maintenir le patrimoine véhiculé de ce type de bâtiment. De façon plus intéressante, ce débat met en exergue l'ambiguïté qu'il existe entre les acteurs autour de la notion d'authenticité du bâtiment, dont le respect est primordial pour préserver la légitimité et en conséquence la protection institutionnelle.

Quand la fonction d'un bâtiment protégé ne peut plus être maintenue et est donc abandonnée lors de travaux d'intervention, sa survie dépend des valeurs que l'ensemble des parties prenantes d'un tel projet décide ou non de préserver et de mettre en avant, i.e. sa valeur historique ou artistique. Deux solutions existent quand la fonction originelle a disparu ou que son maintien n'a plus d'intérêt au regard des temps modernes, e.g. les bains ottomans (Büyükdigan, 2003). Premièrement, le bâtiment peut subir une muséification et être transformé en un musée (Herzog, 2000). Alternativement, une toute nouvelle fonction peut être donnée à un bâtiment protégé dont la structure existante a été gardée ; ce phénomène est appelé l'adaptive re-use ou reconversion (Langston & Shen, 2007 ; Goven, 2011). Diviser ce changement de fonction en deux catégories fait sens car « tous les bâtiments [...] s'adaptent en toute circonstance car leurs usages changent constamment » (Brand, 1995: 2).

La fonction est donc la caractéristique du bâtiment la plus compliquée à respecter en cas de travaux d'intervention et donc la plus simple à éliminer et à changer surtout quand cette dernière ne convient pas aux exigences contemporaines (Dethier, 1978). Un architecte d'État détaille en effet que « *garder la fonction initiale est rare pour la bonne et simple raison que pour moderniser et s'adapter à la société actuelle, un bâtiment protégé ne peut pas être maintenu dans son intégralité et donc avec sa fonction* ».

Cependant, comme les spécialistes du patrimoine l'expriment depuis le XVIII^{ème} siècle, la légitimité d'un bâtiment protégé est basée sur sa fonction (Rouillard, 2006). Quand la fonction fait partie intégrante de l'identité du bâtiment et justifie en elle-même la protection, une troisième, et moins commune, façon de préserver le patrimoine véhiculé existe et mérite une attention particulière. En effet, le risque de se débarrasser de la fonction est de tuer la *raison d'être* du monument et de mettre en péril l'ensemble du patrimoine véhiculé du bâtiment qu'il vaudrait mieux détruire que lui attribuer une

nouvelle fonction (Proust, 1904). Une telle solution est aujourd'hui mise de côté pour la bonne et simple raison que la perpétuation de la fonction originelle, et de son programme, n'adhère pas au postulat actuel qu'un bâtiment protégé doit être « viable économiquement » pour survivre (Bélaval, 2012: 5; Goven, 2006: 13). En conséquence, il est intéressant de se concentrer sur ce type d'intervention pour trois raisons.

Comme le même architecte nous le détaillait, une première raison est de suivre le postulat du père du fonctionnalisme Louis Sullivan « la forme suit la fonction » (1896). En effet, un bâtiment existant matérialise un programme et une idée, mais avec le temps, cette idée se détériore en même temps que l'objet, ce qui rend la compréhension du lieu incompréhensible ; le rôle des parties prenantes est donc de « *projeter le bâtiment existant dans le futur tout en définissant comment son programme initial prendra forme à travers la transformation matérielle* ».

Ensuite, se concentrer sur une telle pratique constitue le meilleur moyen d'étudier à son paroxysme comment l'« ancien » est véritablement entrelacé avec le « nouveau » aussi bien symboliquement que matériellement. En analysant comment il est possible d'intégrer dans un bâtiment protégé des éléments modernes ou « vert » qui permettent son utilisation sans altérer son authenticité, l'analyse met en exergue le traitement paradoxal du patrimoine véhiculé et comment ne pas le mettre en péril. Dit autrement, si les acteurs doivent modifier la fonction d'un bâtiment pour faciliter sa survie et l'entretenir malgré la protection institutionnelle, qu'advient-il lorsqu'un bâtiment protégé, dont la légitimité institutionnelle ne peut être maintenue qu'en considérant sa fonction, est assujéti à une intervention ?

Finalement, un dernier intérêt est associé au fait qu'une telle modification radicale peut entraîner la « déprotection » du bâtiment, *i.e.* la perte de son caractère instanciationnel, car même si la fonction doit être traitée avec le plus grand soin, la maintenir à tout prix ne doit pas mettre en péril la vie des futurs utilisateurs et doit leur permettre de jouir de la nouveauté sans être menacés par la part ancienne du bâtiment (Riegl, 1903). Une telle obligation de trouver un équilibre entre l'ancien et le nouveau, *i.e.* entre le respect du patrimoine véhiculé et l'intégration d'ajustements contemporains, est donc l'une des principales urgences à gérer au regard de l'entretien des bâtiments protégés (Donnedieu

de Vabres, 2006). Et comme de nombreux architectes l'ont exprimé durant les entretiens : « *faire de telles interventions rend ce type de travaux vraiment excitants !* »

Le design de recherche

Pour établir le lien nécessaire entre notre cadre théorique et nos données empiriques, nous utilisons dans le cadre de notre dissertation de thèse, *l'approche constructiviste de la méthodologie dite de la théorie ancrée* (Charmaz, 2014) qui est définie comme « le moyen d'apprendre des mondes que nous étudions et comme une méthode pour développer des théories pour les comprendre ... méthode qui suppose que tout rendu théorique offre une interprétation du monde étudié et non pas une image exacte de ce dernier » (2014 : 17). À la différence de l'approche classique de la théorie ancrée, l'approche constructiviste accepte que les chercheurs utilisent un cadre théorique prédéfini pour analyser leurs données (cf. Glaser, 2005 ; Charmaz, 2012). À travers cette perspective, notre rôle était de capturer la complexité qui caractérisait la nature du phénomène étudié et de décrire sa complexité et son ambiguïté avec le plus de facettes possibles (Justesen & Mik-Meyer, 2012).

Tout en nous positionnant à l'intérieur du terrain, sans adopter pour autant un posture de recherche-intervention (Hatchuel & Molet, 1986; David, 2012), notre intérêt, et souhait, était d'interagir avec les principaux acteurs dans l'optique de mieux comprendre ce qu'ils faisaient et comment, et donc de collecter des données et de développer l'analyse à travers le partage de ces expériences et nos interactions avec les acteurs ; mais aussi via d'autres sources de données (Charmaz & Mitchell, 1996 ; Bryant, 2002). Au regard de notre intérêt de comprendre « comment l'ancien et le nouveau sont entrelacés », notre choix d'utiliser une telle approche constructiviste était pertinente car elle constitue la meilleure méthodologie pour répondre à la question « comment ? » (Charmaz, 2014).

Adopter cette méthodologie nous a aussi permis en tant qu'apprenti-chercheur d'exprimer et de théoriser notre vision du terrain dans le sens où la théorie émergente est une interprétation qui ne peut pas être séparée de la dimension personnelle propre à la posture constructiviste. C'est la raison pour laquelle les théories développées par plusieurs chercheurs, qui étudient le même cas, peuvent être complètement différentes

malgré les mêmes idées préliminaires qu'ils pourraient avoir (Clarke, 2012). Une telle approche est d'autant plus utile qu'elle permet d'explicitier comment les acteurs construisent du sens et agissent et aussi de mettre en exergue dans quelle mesure de telles constructions sont ancrées dans les institutions, les structures (cachées), les réseaux, etc. (Clarke, 2005). De plus, la réflexivité permise par cette approche et la marge de manœuvre laissée au chercheur en termes de mises en place et d'interprétation des résultats, nous sont apparues comme intéressantes (Thorne, Jensen, Kearney, Noblit & Sandelowski, 2004).

En effet, aussi bien les données que leur analyse se produisent « selon des conditions structurelles préexistantes et sont influencées par les perspectives, les privilèges, les positions, les interactions du chercheur et les lieux géographiques » (*ibid*, 2014: 240).

Car nous voulions questionner nos idées préconçues tout en définissant notre modèle théorique relié au projet, cette approche nous est apparue comme l'outil le plus pertinent pour mutualiser toutes les différentes perspectives rencontrées – aussi bien celles des participants que les nôtres qui peuvent affecter le point de départ de notre recherche – en une seule et unique interprétation qui agit comme une réalité commune entre toutes.

Dans ce sens, à travers notre travail de thèse, nous avons essayé d'être engagés dans le terrain dans l'optique d'augmenter notre connaissance du phénomène étudié tout en répondant à une problématique sociétale (Van de Ven, 2007), *i.e.* la modernisation des bâtiments protégés. Choisir cette méthodologie est donc apparue comme un challenge rendant le travail de thèse plus excitant.

Le choix de notre terrain empirique a été motivé par notre volonté de trouver un réel cas de bricolage, ce qui est le cas de à travers l'Institution des Bâtiments Protégés car les acteurs doivent ici faire avec le bâtiment existant, et son aspect matériel associé, pour penser et construire la nouvelle version du bâtiment qui comprend donc aussi bien des anciens que des nouveaux éléments. Améliorer la connaissance sur le bricolage, toujours relativement inexploré dans la littérature, est aussi rapidement devenu notre principal objectif.

Le contexte empirique

Au delà du leitmotiv populaire « le patrimoine passe avant tout » qui gouverne l'Institution des Bâtiments Protégés, le but de l'institution est de protéger les bâtiments possédant des qualités architecturales et historiques mettant en lumière un message national. Dans le cas de travaux d'intervention, les acteurs évoluant au sein de cette institution – les architectes d'État, ceux de l'agence d'architecture choisie, le client, les fondations et associations de protection – ont pour but de mettre en avant et de respecter l'authenticité du bâtiment pour la raison que c'est à travers cette dernière que le bâtiment acquiert sa légitimité institutionnelle et donc son caractère instanciationnel.

Si il était inconcevable jusqu'à la fin de années 1970 d'intégrer des nouveaux matériaux altérant l'esthétique des bâtiments protégés, l'émergence de nouvelles idées, comme celles du développement durable il y a vingt ans, engendrèrent de nouvelles pressions institutionnelles (Rouillard, 2006). Alors que les architectes travaillant sur de tels bâtiments n'ont toujours pas légalement l'obligation de suivre les nouvelles normes ou politiques – « vertes » par exemple – et bénéficient de nombreuses exceptions, de nombreux acteurs se posent aujourd'hui la question de leur implémentation. Et parce que diverses mesures vont devenir incontournables et exigées dans un futur proche et car l'intérêt du bâtiment « vert » ne fait qu'accroître, la plupart des bâtiments protégés qui subissent de tels travaux sont aujourd'hui améliorés en fonction de ces idées contemporaines.

Au regard de cette dissertation et de notre question de recherche, nous avons décidé d'étudier cette institution dans deux pays différents – le Danemark et la France – où les approches en terme de préservation du patrimoine étaient similaires (Jokilehto, 1986). En effet, au delà du respect de l'authenticité et de comment ils la conçoivent, les deux pays basent leur approche de protection patrimoniale sur le respect d'un équilibre entre l'essence du bâtiment et ses matériaux. Il est par exemple dans ces pays, *a contrario* de l'Allemagne, impossible de remplacer une pierre taillée par une pierre en plastique imprimée en 3D. Cependant, car les considérations du développement durable, comme exemple d'ajustements contemporains, n'étaient pas assez différentes entre les deux pays, nous avons décidé d'analyser ces terrains avec l'intention d'augmenter notre

potentiel de généralisation et de saturation théorique (Charmaz, 2014), *i.e.* abandonner l'idée d'une étude comparative.

Il y a actuellement 9000 bâtiments protégés au Danemark et 43000 en France allant du petit pavillon au château en passant par le complexe industriel. Ces bâtiments sont protégés à travers l'Acte Danois sur les Bâtiments Protégés et la Préservation des Bâtiments et des Environnements Urbains (2011) et le Code Français du Patrimoine (2014). Une règle commune demeure l'obligation pour chaque intervention affectant un bâtiment protégé de disposer d'un permis délivré par l'autorité patrimoniale compétente. En effet, les propriétaires ou exploitant d'un bâtiment protégé ne peuvent pas faire ce qu'ils veulent et doivent en cas d'intervention respecter les valeurs protégées et l'authenticité du bâtiment. Tout changement doit être validé par un architecte associé à un Département Culturel Public dédié ; par exemple les Architectes des Bâtiments de France.

Selon plusieurs critères, une étape préliminaire a été de choisir le type de bâtiments sur lesquels nous devions concentrer notre étude. Un premier critère était que le bâtiment devait être légalement protégé et utilisé avec la même fonction avec laquelle ou pour laquelle il a été construit. Ensuite, il devait avoir subi des travaux d'intervention et l'intégration de nouveaux matériaux et éléments. L'accès au terrain, et aux acteurs, devait aussi être relativement facile ; c'est la raison pour laquelle les bâtiments privés ou ceux appartenant à la Royauté Danoise ont été mis de côté. Finalement, les acteurs travaillant sur ces bâtiments devaient réussir dans l'objectif de maintenir le caractère instantiationnel de l'artéfact malgré sa modification. Ce faisant, nous avons décidé d'étudier trois bâtiments protégés à Copenhague entre Octobre 2013 et Mars 2014 – cette période correspondant à notre présence à la Copenhagen Business School, présence nécessaire dans le cadre de la cotutelle de thèse – et en fonction de ce nous avons découvert et de ce qu'il fallait continuer d'explorer, nous avons sélectionné et étudié trois bâtiments protégés à Paris entre Juillet 2014 et Janvier 2015.

Tous les cas choisis suivent la typologie dite de « sélection orientée information » de Flyvbjerg (2006), *i.e.* quelles sont les meilleurs cas à étudier pour résoudre le challenge empirique ? ; le but étant ici d'améliorer l'exploration du même phénomène dans plusieurs circonstances (Yin, 2013).

Selon une sélection parallèle entre les pays, *Nyboder* et le *Panthéon Français* sont des cas paradigmatiques et critiques (pour établir une connaissance et permettre la déduction) ; la *Sølvgade Skole* et l'*École des Mines* sont des cas de variation maximale (pour obtenir de nouvelles informations sur le sujet étudié) ; et la *Munkegård Skole* et la *piscine Molitor* sont des cas extrêmes ou déviants (pour améliorer le potentiel de généralisation).

Le premier bâtiment est le quartier résidentiel de *Nyboder* construit en 1631 par le roi Christian IV qui a subi, à cause de problèmes de moisissures, des rénovations depuis 2011 pour permettre aux étudiants de l'armée danoise de continuer à y vivre. Ces maisons demeurent le quartier résidentiel le plus typique du pays et chaque danois le connaît. Le second bâtiment danois est une école, la toute première école primaire publique du Danemark construite en 1847. Le bâtiment fut agrandi en 2012 pour corroborer aux nouvelles demandes de l'éducation nationale d'intégrer des activités extra-scolaires. Notre dernier cas danois est l'école *Munkegård*, conçue par le célèbre designer danois Arne Jacobsen et construite dans les années 1950 et rénovée en 2005. Les architectes ont ici dû rénover l'ancienne bâtisse tout en réfléchissant à une extension sous-terraine faite selon les anciens détails et formes. En France, notre premier terrain est celui du *Panthéon*. Ancienne église construite en 1790 par Soufflot et Rondelet, elle est dorénavant utilisée comme cénotaphe des Grands-Hommes et Haut-Lieu de la République. Si le bâtiment a subi des restaurations incessantes, notre étude se concentre sur les rénovations du Dôme et de la Lanterne. Le second bâtiment protégé français est l'école des Mines de Paris, construite en 1707 par Le Blond. Nous nous intéressons plus particulièrement à la rénovation de l'amphithéâtre Schlumberger qui est considéré comme obsolète au regard de sa fonction et de son utilisation et pas à la hauteur de la réputation de l'école. Et enfin le dernier bâtiment étudié est la Piscine Molitor construite par Pollet en 1929. Délaissée depuis la fin des années 1980 et transformée en haut-lieu du street-art parisien, la Mairie de Paris, propriétaire des lieux, a demandé sa complète rénovation en 2007 qui s'est terminée en mai 2014.

Selon l'approche constructiviste de la méthodologie dite de théorie ancrée (Charmaz, 2014), et via ces six cas, nous avons collecté et analysé quatre types de données pour effectuer l'étude. L'avantage d'utiliser une telle méthodologie réside dans l'évaluation de l'adéquation entre les intérêts de recherche initiaux et les données émergentes et dans la flexibilité permise pour suivre nos idées et celles des répondants. Pour interpréter les données, nous avons débuté par lire des ouvrages qui introduisent l'histoire du Patrimoine (e.g. Jokilehto, 1986; Sire, 2005), les lignes directrices des travaux d'interventions (e.g. Viollet-le-Duc, 1858-1872 ; Rouillard, 2006), et qui fournissent la connaissance générale et nécessaire sur l'architecture (e.g. Pérouse de Montclos, 1972). Après cette étape préliminaire, nous avons ciblé les acteurs clefs pour chaque cas pour les interviewer. En effet, pour analyser un sujet spécifique, les interviews constituent la méthode la plus utile pour les recherches interprétatives (Denzin & Lincoln, 2000) ; le but étant ici d'explorer et non d'interroger et donc de trouver l'équilibre entre poser les questions pertinentes et obtenir des réponses intéressantes (Charmaz, 2006). En adoptant, cette posture dite d'« entretien actif », les données générées sont coproduites (Holstein & Gubrium, 1995).

Dans notre cas, nous avons conduit 24 entretiens avec les principales parties prenantes des projets d'intervention étudiées, *i.e.* des architectes, des clients, des fondations, des représentants des Départements Culturel Public, et des experts en bâtiments et en patrimoine. L'intérêt était ici de voir un phénomène précis à travers la perspective de plusieurs acteurs (Eisenhardt & Graebner, 2007).

En moyenne, les entretiens ont duré 1h15 et ont été conduits aux bureaux des acteurs ou directement sur les sites de construction. Tous ont été enregistrés et retranscrits manuellement pour pouvoir annoter les intonations, hésitations des participants, etc. Les entretiens étaient semi-structurés dans l'optique de générer de nouvelles connaissances et de stimuler les réflexions des interviewés autour de trois thématiques ciblant des problèmes et des questions prédéfinis (Justesen & Mik-Meyer, 2012). Les guides d'entretien ont évolué en fonction des premières données récoltées ; c'est la raison pour laquelle en France, les entretiens se concentraient moins sur la question du

développement durable et plus sur l'authenticité des bâtiments. Au regard des questions éthiques, à chaque entretien était spécifié comment les données seraient stockées, analysées et diffusées, et comment l'anonymat serait respecté.

Au delà des textes préliminaires lus pour comprendre le secteur et générer de nouvelles connaissances (Justesen & Mik-Meyer, 2012), nous avons étudiés de nombreux documents pour développer l'analyse mais aussi trianguler et confirmer ce qu'ont pu nous dire les interviewés (Miles & Huberman, 1994). Les archives collectées étaient principalement des textes réglementaires – le Danish Building Regulations BR10 ou le Code du Patrimoine français – l'ensemble des appels à projets, réponses et plans des architectes, quand ils étaient disponibles et non confidentiels, et des ouvrages de recommandations (comme le Realdania 2050 pour les perspectives liées au développement durable au Danemark). De plus, nous avons mobilisé de nombreux documents internationaux relatifs au traitement des bâtiments protégés, comme les Chartes de l'ICOMOS ou les résumés de conférences sur le sujet (1994).

Parce qu'il s'agissait d'une étude dans le secteur de l'architecture, nous avons décidé que l'analyse prendrait aussi en compte les sources photographiques (cf. Harper, 2002). La volonté d'utiliser de telles données provient du constat que nous ne pouvions pas constater en temps réel comment les acteurs entrelaçaient l'« ancien » et le « nouveau ». En effet, au regard de la période durant laquelle les données ont été collectées, période qui avait lieu certaines fois après la fin de travaux – certains d'entre eux s'étant terminés il y a au moins trois ans – nous ne pouvions pas observer les différents processus associés aux interventions sur ces bâtiments protégés. C'est la raison pour laquelle durant les rencontres, pour constater *ex post* les différents arrangements faits par les acteurs, nous leur avons demandé de nous montrer ce qu'ils ont fait sur les bâtiments et comment. Nous avons pris en conséquence des photographies pour illustrer ce que les acteurs nous ont expliqué (Vince & Warren, 2012) et débuté le codage pour mettre en avant les données explicites et implicites (Banks, 2007 : 47).

Quand cela était possible, nous avons aussi pratiqué des observations dans l'optique de collecter de la connaissance tacite et informelle (Polanyi, 1966). Suivant une posture ethnographique, le but fut donc de comprendre les règles, les comportements et les pratiques prises-pour-acquises des membres de l'organisation (Charmaz & Olesen, 1997).

Nous avons opté pour une posture dite de participant-comme-observateur (Gold, 1969) et parce que nos interprétations étaient en réalité nos outils d'études (Esterberg, 2002), nous avons validé nos observations avec un acteur du projet auquel nous avons accès pour constituer une analyse adéquate (Kvale, 1996). À la fin de la collecte de données, nous avons écrit 39 pages de notes, équivalentes à 9 observations. Ces notes, bien que brèves initialement, ont ensuite été transformées en notes descriptives, analytiques et réflexives (Eriksson & Kovalainen, 2008). L'intérêt était d'observer comment les acteurs interagissaient et comment le contexte affectait ces interactions, et de mettre en avant les « différentes positions sociales des acteurs et leurs stratégies » (Järvinen & Mik-Meyer, 2005: 118).

Pour découvrir et analyser comment une organisation entrelace l'« ancien » et le « nouveau » durant une intervention sur un bâtiment protégé, et comment une institution peut être véhiculée pendant que son instanciation est modifiée, nous avons utilisé les outils de codage de la méthodologie de la théorie ancrée. Notre but était de développer une théorie substantive et originale (Charmaz, 2007). Au regard du nombre raisonnable d'entretiens conduits, nous avons pris la décision de coder sans l'aide de logiciel tel que NVivo. L'autre raison était aussi que nous voulions de cette façon s'imprégner des données pour pratiquer une analyse fine et en profondeur et jouer avec ce que nous avions découvert pour construire un résultat cohérent et bien articulé.

Nous avons débuté par effectuer un codage initial, et plus spécifiquement un codage ligne-par-ligne. Ce type de codage nous a permis de mettre en avant méticuleusement les détails importants tout en circulant rapidement entre les données. Nous avons aussi utilisé une méthode de comparaison constante (Glaser & Strauss, 1967) pour trouver les similarités et différences et pour déterminer quelles données devraient être collectées ultérieurement. Par exemple, « respecter un budget fixé », « se baser sur les valeurs de l'institution » ou « repenser l'existant pour intégrer des nouvelles idées » sont certains des codes. C'est au cours de cette étape que nous avons réalisé que le développement durable était juste un aspect de ce que les acteurs considéraient comme « nouveau ».

Après cette première étape de codage ouvert, nous avons implémenté un codage axial pour synthétiser les précédents codes et obtenir des thèmes permettant de rendre cohérente l'analyse émergente (Strauss, 1987) et débiter la conceptualisation et

l'association des données. Ce faisant, nous avons développé un cadre analytique qui nous a permis de cibler les données spécifiques (manquantes) requises et de définir notre question de recherche. « Outil normatif », « Préférence individuelle » ou « Promulgation du patrimoine » sont des exemples de thèmes.

Une dernière étape a été de développer des dimensions agrégées et de les lier entre elles à travers un codage théorique (Glaser, 2005). Le but était d'atteindre un niveau supérieur d'objectivation et de conceptualisation tout en associant et intégrant l'ensemble des thèmes précédemment trouvés. En conséquence, à la fin de la phase de codage, trois codes finaux étaient mis en avant – « designer le cadre interprétatif », « équilibrer la construction de l'artéfact » et « sélectionner les ressources » – rendant dynamiques les principaux concepts de la thèse – l'acteur, l'artéfact et le cadre institutionnel – dans l'optique d'expliquer le processus de construction de l'instanciation. Au regard de la saturation théorique, et en plus de sa validation par nos pairs, nous avons statué que nous avions atteint cette saturation quand les histoires, récits et explications des interviewés devenaient récurrents, mettaient en exergue les mêmes problématiques et solutions et n'apportaient plus aucun éléments à notre réflexion intellectuelle et à notre théorisation (Charmaz, 2014).

Résultats et contributions

Les principaux résultats

Le but de la dissertation était de comprendre, à partir de la perspective des acteurs comment ces derniers modifient une instanciation d'une institution établie. Dit différemment, nous avons regardé comment les acteurs imaginent et construisent une nouvelle instanciation, basée sur une existante. Plus spécifiquement, nous avons étudié comment les acteurs parviennent à véhiculer les éléments institutionnels grâce un nouvel artéfact, *i.e.* une instanciation, qu'ils construisent pendant qu'ils la construisent. Pour se faire, nous avons divisé notre analyse de cette action collective de construction en deux étapes, une symbolique et l'autre matérielle. Ces deux étapes font partie d'une dynamique plus générale de bricolage ; la première étant élaborée comme une

condition *sine qua non* permettant la seconde. Durant tout ce processus, les acteurs travaillent sur l'artéfact existant en n'utilisant exclusivement que les ressources qu'ils ont sous la main et/ou celles dont ils savent qu'elles pourraient aider à la résolution du challenge de modifier le véhicule matériel artéfact, *i.e.* de modifier l'instanciation précédente. Ces ressources incluent les outils institutionnels, les matériaux, les valeurs, etc.

Concernant cette première étape, nous nous sommes donc concentrés sur comment les acteurs interprètent et designent symboliquement le **cadre interprétatif** qu'ils ont besoin de respecter pour transformer l'artéfact dans l'optique que ce dernier réponde aussi bien aux exigences institutionnelles qu'à celles des différents acteurs impliqués. Plus spécifiquement, nous nous sommes intéressés à ses éléments constitutifs et à son rôle. En effet, si l'institutionnalisme scandinave a déjà expliqué comment les acteurs traduisent en pratique une idée intangible, la question de la composition d'un tel cadre demeure sous-étudiée.

La création de ce cadre s'effectue donc par le biais des trois piliers institutionnels : culturo-cognitif, régulateur et normatif ; piliers qui sont les éléments avec lesquels les acteurs vont jouer pour savoir quelle action collective il est possible d'implémenter et dans quelle mesure. Nous mettons en avant dans notre manuscrit de thèse le lien qu'il existe entre l'institution et l'instanciation et les éléments que les acteurs prennent en compte pour s'assurer que l'artéfact reflètent bien l'institution établie – l'Institution des Bâtiments Protégés – même après plusieurs secousses. Ce dernier garde donc son caractère instantiationnel malgré la modification. Tout au long de l'étude, le manuscrit souligne l'importance d'un tel cadre pour unifier l'ensemble des interprétations de l'authenticité du bâtiment – qui demeure l'élément qui qualifie le patrimoine véhiculé du bâtiment et à partir duquel il prend sa légitimité – dans le but de travailler dans le même sens. Le but pour les acteurs est donc d'utiliser ce cadre interprétatif comme un moyen d'interpréter collectivement une caractéristique institutionnelle spécifique mais primordiale pour permettre la mise en place d'une pratique qui corrobore avec ce cadre. *De facto*, nous avançons que ce cadre est une construction *a posteriori* qui facilite la prise de décision collective dans le sens qu'il agit comme une connaissance stabilisée et

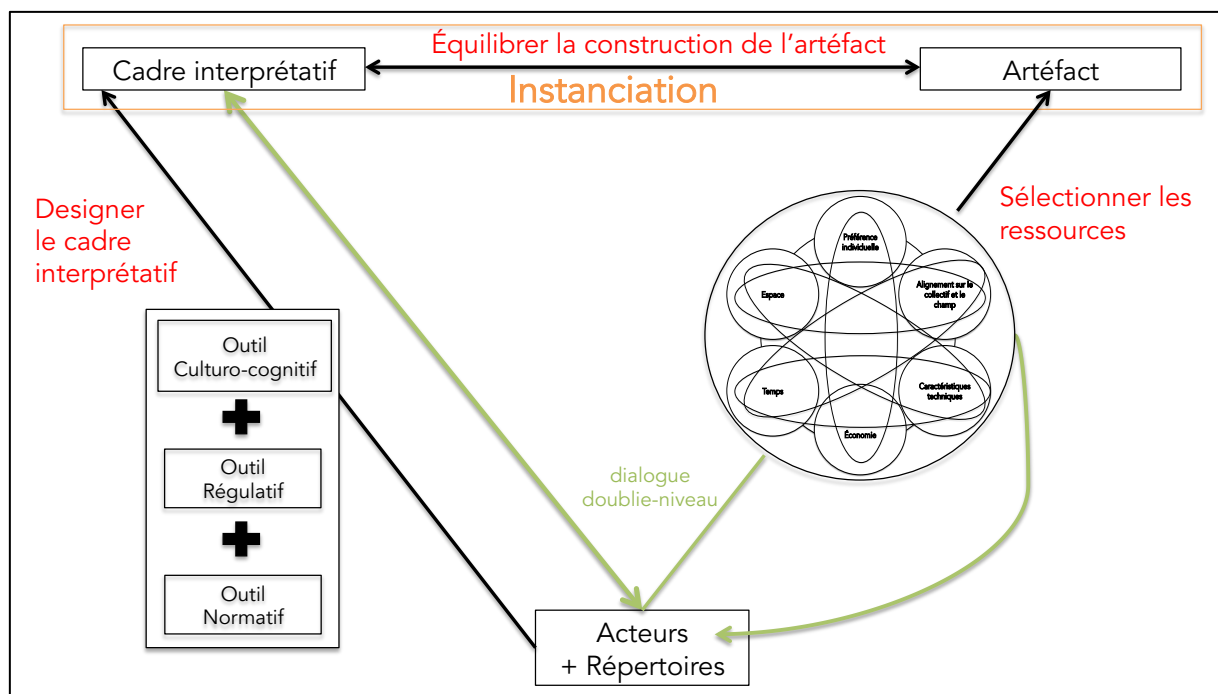
partagée entre les acteurs. Par extension, nous démontrons que la traduction du cadre en un artéfact renforce la légitimité de l'institution.

Au cours de la seconde étape, nous avons analysé comment les acteurs traduisent ce cadre interprétatif tout en modifiant matériellement l'artéfact, *i.e.* l'instanciation, qui véhicule et qui doit continuer de véhiculer l'institution. Comme nous l'avons dit, les acteurs utilisent ce cadre comme une ressource collective pour situer et guider leurs actions. Durant cette étape, nous nous sommes donc concentrés sur le bricolage collectif et plus spécifiquement sur le **dialogue double-niveau** effectué pour sélectionner collectivement les ressources qui devront être entrelacées pour produire un résultat unique qui continue de véhiculer l'institution. Pour se faire, nous développons la littérature du bricolage en y joignant une meilleure compréhension du dialogue dans le cas de la sélection collective des ressources à disposition ; phénomène qui demeure sous-étudié par les chercheurs. En effet, nous divisons le dialogue en deux dimensions tout en avançant que les acteurs doivent simultanément dialoguer avec le cadre interprétatif qu'ils partagent pour équilibrer la construction de l'artéfact via des tests-erreurs et avec l'ensemble de leurs ressources à disposition qu'ils sélectionnent en fonction de six critères de sélection : la préférence individuelle, l'alignement sur le collectif et le champ, l'économie, les caractéristiques techniques, le temps et l'espace.

Le premier niveau du dialogue auquel nous nous intéressons met en exergue les différentes matérialisations suggérées par les parties prenantes pour équilibrer l'«ancien » et le « nouveau », *i.e.* le respect du patrimoine véhiculé malgré l'intégration de nouveaux matériaux ou d'éléments nécessaires à la survie et à la légitimité du bâtiment. Plus spécifiquement, nous détaillons comment les acteurs pratiquent le test-erreur pour effectuer des compromis en soumettant leur solution au cadre interprétatif qu'ils partagent, et qu'ils ont eux-mêmes conçu dans l'optique de positionner et d'améliorer le caractère instanciationnel du bâtiment. En effet, sans l'intégration de cette construction symbolique, un artéfact ne demeure qu'un banal artéfact. C'est la raison pour laquelle, nous avançons que la traduction du cadre interprétatif en pratiques matérielles adéquates entraîne le renforcement de la légitimité de l'artéfact comme l'instanciation de l'institution malgré sa transformation tangible et, certaines fois, innovante.

Concernant le second-niveau, nous proposons dans la thèse une analyse détaillée du mécanisme de test-erreur en nous concentrant sur comment une décision finale est prise au regard du résultat choisi, *i.e.* comment les acteurs sélectionnent collectivement les ressources matérielles pertinentes pour (re)construire une instantiation approuvée par tous. Après avoir remarqué qu'un tel processus de prise de décision demeure confus pour la raison que la décision est divisée entre toutes les parties prenantes, nous avons découvert et surligné l'importance de six critères de sélection pour organiser cette anarchie organisationnelle entre les acteurs à travers des consensus autour des ressources à disposition à sélectionner, à partir des répertoires de chaque acteur, et à utiliser. Ce faisant, la dissertation apporte une nouvelle illustration sur le fait que le bricolage collectif n'est pas une processus improvisé mais plus une activité structurée dans le sens où les multiples itérations entre les acteurs selon ces différents critères déconnectent en deux étapes la conception et la production du résultat.

Le processus de construction de l'instanciation : un processus de bricolage collectif



Ce processus modélise comment une instantiation peut continuer de véhiculer l'institution qui la définit malgré la modification de cette même instantiation. Ce

processus nous permet d'apporter une perspective originale sur le concept de bricolage collectif qui peut donc être interprété comme un modèle expliquant comment les acteurs s'engagent dans une prise de décision collective après s'être engagés dans un dialogue simultané avec le cadre interprétatif qu'ils ont symboliquement conçu et avec chaque répertoire des acteurs en présence. Leur intérêt est de traduire matériellement ce cadre à travers l'instanciation existante, *i.e.* construire/modifier une nouvelle instanciation de la même institution. En conséquence, notre première contribution concerne la littérature néo-institutionnelle avec un focus sur le cadre interprétatif. Nous contribuons aussi à la littérature sur le bricolage en avançant une meilleure compréhension de la pratique de bricolage collectif en espérant légitimer son implémentation aussi bien dans les organisations que dans les recherches en organisations. Nous proposons donc : 1) que les acteurs doivent designer un cadre commun pour permettre le bricolage collectif, 2) qui est une activité structurée basée sur un mécanisme de dialogue double-niveau où chaque solution est équilibrée et testée en fonction du cadre et où la sélection de ressources est basée sur l'entrelacement de six critères rendant explicite un complexe-et-caché processus de prise de décision.

Créer un pont entre l'institutionnalisme scandinave et le bricolage via le design du cadre interprétatif : l'étape préliminaire au bricolage collectif

Un simple bricoleur agit grâce à la connaissance mythique qu'il a créé à partir de l'environnement auquel il appartient (Boxenbaum & Rouleau, 2011). De façon similaire, notre étude montre que plusieurs acteurs ont aussi besoin de créer symboliquement une connaissance commune – ou structure comme Lévi-Strauss la nomme (1962) – pour implémenter collectivement un bricolage. En effet, si un bricoleur solitaire ne pense qu'à son résultat, et à ses ressources qu'il a à utiliser pour le construire, selon sa propre interprétation et appréciation de son environnement (Jodelet, 1989), un collectif de bricoleurs doit en revanche baser ses compromis et finalement prendre des décisions sur quelles ressources utiliser selon une interprétation commune permettant l'implémentation d'une action commune. L'intérêt pour un tel groupe de construire symboliquement une unique réalité se trouve dans l'unification de l'ensemble des

perceptions individuelles du même environnement social ; une telle similarité stabilise leurs perceptions et permet donc sa circulation au sein du collectif (Moscovici, 1989). De plus, un tel cadre agit comme un levier facilitant l'action collective car les acteurs partagent une connaissance commune qui « programme » en conséquence les pratiques du groupe (Weber, 1968)

Au regard du bricolage, compris comme un régime d'action idéal-typique, une telle pratique peut être stabilisée autour du fait qu'elle reflète les visions du monde qui dictent et supportent les pratiques appropriées, etc. (Nisbett, 2003 cité dans Duymedjian & Rüling, 2010: 139). Les visions du monde – ou métaphysiques dans Duymedjian et Rüling (2010) – incluent autant les valeurs symboliques que matérielles et structurent le monde des acteurs aussi bien que leurs interactions (*ibid*, 2010: 141). En fait, le bricolage collectif ne peut pas être conceptualisé en dehors d'un contexte symbolico-matériel car il lui donne son sens. La cognition est située dans la mesure où elle permet l'action (Duymedjian, 2010).

La présence de ce double contexte motive notre mobilisation de l'institutionnalisme scandinave. Cette littérature nous aide en effet à expliquer pourquoi un bricolage collectif est intéressant dans un contexte néo-institutionnel : le processus de construction de l'instanciation reflétant une interprétation commune de l'institution. La construction symbolique du cadre interprétatif doit être similaire ou isomorphe entre les acteurs dans l'optique de traduire matériellement l'institution à travers l'artéfact qui la véhicule (Czarniawska & Sevón, 1996). De plus, cette approche scandinave est particulièrement utile, si non primordiale, car elle rend explicite comment une pratique peut émerger de l'ordre social (Sahlin & Wedlin, 2008) et comment les acteurs l'appliquent à une échelle micro (Boxenbaum & Strandgaard Pedersen, 2009).

En effet, l'institutionnalisme scandinave met en exergue comment un cadre cognitif peut être conçu au sein d'un contexte institutionnel et d'une même communauté de pratique. Ce cadre cognitif constitue un prérequis au bricolage (Baker & Nelson, 2005) dans la mesure où avoir un tel cadre interprétatif des métaphysiques permet l'implémentation d'un tel processus tout en facilitant la collaboration et les dialogues entre les répertoires des acteurs. Quand un collectif partage une même connaissance des métaphysiques en présence, le cadre obtient le statut de ressource dans le sens où il appartient et est

présent dorénavant dans tous les répertoires des acteurs et est utilisé en conséquence. À travers notre étude empirique, nous démontrons, comme le supposaient Duymedjian et Rüling (2010), que le bricolage collectif ne peut pas implémenté dans le vide car les bricoleurs ont besoin d'une vision d'une monde et de partager leurs répertoires pour engager une pratique de dialogue.

Dans notre cas, un véhicule institutionnel devait être modifié mais c'était en réalité l'institution que les acteurs devaient définir dans la mesure où ils devaient ancrer sa légitimité à travers la modification de l'instanciation ; ce résultat soulignant en conséquence que la matérialité a bien un intérêt institutionnel (Colombero, 2014; 2015). Pour penser en dehors de la « boîte noire », tout en restant à l'intérieur pour jouer avec les contraintes existantes, ce que permet le bricolage (Cartel, 2013), nous démontrons que les acteurs doivent d'abord réinterpréter les éléments institutionnels, *i.e.* définir *a posteriori* ce qui est déjà pris pour acquis et légitime. Pour se faire, les acteurs utilisent les trois piliers comme outils pour rendre significatives les limites institutionnelles qu'ils doivent respecter et quelles caractéristiques ils doivent préserver selon le cadre designé. Toujours selon le contexte empirique, nous montrons que le cadre « authenticité du bâtiment » - sur lequel repose l'Institution des Bâtiments Protégés – diffère selon les bâtiments concernés dans le sens où nous observons que certaines valeurs étaient plus importantes à respecter que d'autres durant les travaux d'intervention. Les résultats confirment de plus la pertinence de l'institutionnalisme scandinave en mettant en avant le rôle qu'ont les acteurs dans la définition et la diffusion d'un même cadre interprétatif qui peut entraîner des variations au niveau de la matérialisation du résultat (Suárez & Bromley, à venir). Les acteurs stabilisent et renforcent donc l'institution tout en changeant le cadre institutionnel et son application à un cas spécifique, ce qui respecte le paradigme paradoxal avancé par les institutionnalistes scandinaves que la stabilité ne se produit qu'en cas de changement (Czarniawska, 2008).

Le bricolage collectif comme un processus structuré n'est pas de l'improvisation

Ma seconde contribution théorique se concentre sur le bricolage collectif et plus spécifiquement sur le mécanisme de dialogue, qui souffre d'un manque certain de

considération dans la littérature, dû principalement au fait que le concept a été pris-pour-acquis et jamais discuté. Il est intéressant de constater aussi que le terme « dialogue », malgré son rôle primordial dans le processus de bricolage, n'apparaît même pas dans les articles récents sur le sujet, e.g. in Baker et Nelson (2005), Rao et al. (2005), Desa (2012), Højgaard Christensen et Lounsbury (2013) et Smith et Blundel (2014).

Duymedjian et Rüling avaient déjà formulé cette nécessité de se concentrer sur cette dynamique de bricolage (2010: 148-149). Et en réponse à cet appel, nous avons découvert et analysé un dialogue double-niveau simultané entre les acteurs et leur cadre interprétatif – qu'ils ont eux-mêmes créé – et entre leurs répertoires via six critères de sélection. Grâce à ces résultats, le manuscrit permet une meilleure compréhension de comment les acteurs sont collectivement capables de produire un résultat unique et commun, qui est ici symboliquement et matériellement construit. En permettant une meilleure compréhension du processus de bricolage collectif, nous contribuons à développer ce que Perkmann et Spicer ont déjà avancé (2014). Plus précisément, nous démontrons qu'une pratique de bricolage collectif n'est pas gouvernée par un régime d'improvisation dans la mesure où la production finale est le résultat d'itérations entre les acteurs, leurs ressources à disposition et le cadre interprétatif qu'ils ont collectivement développé. Dit différemment, le bricolage collectif est le résultat d'un processus structuré où la conception et la production du résultat sont clairement séparées. En effet, dans notre contexte empirique, la matérialisation de l'artéfact, *i.e.* les travaux de construction entraînant la modification d'un bâtiment protégé, est le résultat de consensus entre les propositions et idées des acteurs qu'ils ont suggérés et soumises à un test-erreur discursif – mais impliquant une question matérielle – dont le but était de s'assurer que le nouveau bâtiment, ou l'adaptation de l'ancien, continuerait de véhiculer les éléments institutionnels requis pour préserver son caractère instanciationnel.

Dans la même veine, l'analyse montre aussi que le processus de prise de décision en cas de bricolage collectif est divisé entre l'ensemble des acteurs et s'opère loin de tout jugements rationnels tout en se basant sur des critères de sélection endogènes et entrelacés. L'impossibilité de prioriser *a priori* les six critères indique en conséquence que le bricolage collectif est basé sur un processus de prise de décision confus où les compromis conditionnent la décision finale. Cette suggestion de plus renforce l'idée que

le bricolage ne suit pas une approche linéaire de prise de décision (Stinchflied, Nelson & Wood, 2013), et que le bricolage collectif n'est pas nécessairement une activité improvisée. Plus précisément, nous avançons que la décision finale n'était pas improvisée dans le sens où les acteurs étaient tous habitués à mettre en œuvre une telle pratique de bricolage et à faire face à une telle situation où ils ont besoin de « mettre de l'ordre dans le chaos » (Weick, 2001: 165) dans l'optique de produire un artéfact pertinent. Ce fut le cas dans notre étude à travers la construction d'un bâtiment approprié au regard du cadre interprétatif « authenticité du bâtiment » et du but de respecter la protection du bâtiment protégé et ses exigences associées. En effet, à travers la création d'un cadre interprétatif et la condition *sine qua non* qu'il représente pour permettre la mise en œuvre d'un bricolage collectif, dans la mesure où il agit comme une ressource cognitive et symbolique partagée entre les acteurs, l'étude confirme que les acteurs sont conscients de la mesure dans laquelle ils peuvent réaliser leur projet matériel et déployer et utiliser leurs ressources à disposition selon diverses manières innovantes (Jones, McPherson & Jayawarna, 2014). De plus, les acteurs étudiés savaient déjà ce qui allait arriver et quels seraient les gros problèmes à traiter et à résoudre, e.g. les évidents compromis à faire. La raison de ce savoir demeure que le processus a été conduit par une organisation – quelque peu banale – spécialisée dans ce type de travaux de construction. Notre étude illustre donc la proposition de Duymedjian et Rüling soulignant qu'implémenter un bricolage ne peut pas être improvisé (2010 : 148).

Au regard du fait que le bricolage collectif n'implique pas d'improvisation, la présente dissertation s'écarte de l'argument considérant ce type de bricolage comme un outil collectif d'apprentissage. En effet, nous postulons que l'apprentissage est difficile via le bricolage collectif car les acteurs ne créent pas un répertoire mutuel et unique avec toutes leurs ressources. Une des raisons est qu'un acteur ne peut délibérément pas prendre et utiliser une ressource à partir d'un répertoire autre que le sien sans le consentement de l'acteur à qui appartient ce répertoire. À l'inverse de l'étude de Garud et Karnøe, où tous les prototypes sont créés grâce à une mutualisation des ressources dont disposent les acteurs acquises via précédents test-erreurs (2003), dans notre étude, une telle réutilisation d'une ressource provenant du répertoire d'un autre acteur était impossible car chaque projet était unique, éphémère et surtout car il se terminait après

une première – et dernière – matérialisation. Par extension, notre étude développe l'argument de Duymedjian et Rüling (2010), avançant que l'échange de ressources, et leur appropriation, est improbable durant des projets courts, car l'addition de ressources pour la production d'un résultat commun n'a aucune incidence sur le répertoire personnel d'un acteur. En effet, les acteurs ne peuvent pas totalement et de façon permanente intégrer les autres ressources, principalement à cause de la diversité des projets auxquels ils sont confrontés et au regard du cadre interprétatif dédié qui est unique à chaque projet.

Perspectives et intérêts empiriques

Limites et perspectives

Le présent document est aujourd'hui assujéti à deux limites principales dont les considérations associées impliquent de futures perspectives de recherche. La première limite est associée à la difficulté méthodologique de suivre en temps réel des travaux d'intervention et donc d'avoir accès aux acteurs au moment où ils étaient impliqués dans ce processus de construction de l'instanciation. Cette difficulté entraîne certaines limites au regard de l'étude en profondeur de ce processus. Une analyse plus fine de comment les acteurs mélangent les éléments constitutifs pour construire le cadre interprétatif pourrait en effet manquer. Similairement, une étude plus vaste du dialogue double-niveau et de l'importance des critères de sélection pourrait procurer plus de profondeur et de compréhension sur le processus de bricolage collectif dans le cadre du processus d'instanciation. Pour mieux apprécier ces phénomènes, une solution pourrait être d'effectuer une recherche-intervention (David, 2012; Aggeri, à venir) ; e.g. participer comme partie prenante à un projet de construction pour développer et mieux analyser les interactions entre les membres d'un tel projet. Une seconde limite s'attache au design de recherche de la double étude de cas. La relation entre l'Institution des Bâtiments Protégés entre le Danemark et la France pourrait déjà être renforcée ; nous avons conscience que la similarité dans leurs approches de protection du patrimoine est insuffisante pour développer une comparaison. Il est important de noter qu'une étude

comparative était prévue jusqu'au moment où nous avons découvert que le développement durable, plus important au Danemark qu'en France, n'était pas autant important dans le secteur des bâtiments protégés que nous avons pu l'imaginer avant de rentrer sur le terrain : aucune différence notable n'ayant émergé. Une possibilité pour effectuer cette comparaison serait de se concentrer sur les politiques patrimoniales à un niveau plus local, *i.e.* les différences entre les politiques municipales de Copenhague et Paris.

Pour développer la présente étude, nous suggérons aussi d'autres perspectives non associées avec les précédentes limites.

Au regard du processus de construction de l'instanciation, la première perspective est évidemment d'appeler à la comparaison avec d'autres secteurs. Il n'est en effet pas clair dans quelle mesure nos résultats peuvent s'appliquer à d'autres secteurs. Une telle étude pourrait de plus entraîner une plus formelle et robuste théorisation du modèle que nous proposons dans la thèse. Une possibilité serait de se concentrer sur d'autres industries culturelles, comme le secteur muséographique où l'introduction de nouveaux outils digitaux transforme l'expérience et les pratiques de médiation (Vilatte, 2007).

Une autre possibilité serait d'étudier un secteur où les acteurs tentent de changer ou d'altérer l'institution établie. Une suggestion serait de trouver un cas où les acteurs modifient une instanciation d'une façon qui entraîne un changement institutionnel ; ces actions, si elles sont délibérées, peuvent être qualifiées sous la dénomination de *travail institutionnel* (Lawrence & Suddaby, 2006; Lawrence, Leca & Zilber, 2013). *De facto*, le secteur médical pourrait être un champ d'étude intéressant ; une idée serait d'analyser la création de l'Institut Pasteur, développé à partir de la demande exponentielle de vaccin contre la rage – un traitement conçu à partir du mélange de plusieurs solutions médicales existantes. Ce cas permettrait d'illustrer un cas de bricolage se déroulant dans un contexte de création ou d'altération institutionnelle (Colombero, Kokshagina & Cartel, 2015).

Une dernière perspective est l'exploration du lien entre le Bricolage et la Psychologie de la Forme (Köhler, 1929), cette littérature se concentrant aussi sur une dynamique de tests-erreurs pour résoudre des problèmes donnés. Son leitmotiv « la forme générale surplombe les détails » se rapporte de plus au principe architectural qui veut que

seulement l'ensemble et la forme du bâtiment important en termes de perception patrimoniale et d'expérience même si les architectes modifient d'infimes détails en intégrant des nouveaux matériaux ou éléments. Cette approche psycho-cognitive pourrait donc nous fournir un moyen intéressant pour investiguer le symbolisme des matériaux à partir d'un autre regard théorique que celui adopté dans la dissertation.

Pertinence empirique

Au regard de l'Institution des Bâtiments Protégés, quand nos successeurs voudront améliorer le patrimoine architectural que nous leur laisserons, il est probable qu'ils fassent exactement comme les acteurs dans notre étude ont fait, *i.e.* designer une nouvelle authenticité pour le bâtiment qui reflète le contexte institutionnel tout en respectant un équilibre entre ce qui doit être préservé et ce qui peut être modifié au sein du bâtiment protégé. Pour cela, il est fort possible qu'ils sélectionnent les ressources matérielles pour modifier l'artéfact tout en respectant la légitimité de l'institution et qu'ils s'engagent dans un processus de bricolage collectif impliquant la construction d'un cadre interprétatif et une prise de décision gouvernée par le test-erreur et les six critères de sélection que nous avons identifié.

En plus de stimuler la réflexivité des acteurs de l'institution étudiée au regard de leurs pratiques, nous pensons que l'étude permet de dépasser les connotations péjoratives qui entachent encore aujourd'hui l'image du bricolage auprès des chercheurs mais aussi d'une plus large audience.

De plus, certaines problématiques sociales actuelles, comme comment les parties prenantes, mais aussi les « gens normaux », pensent le patrimoine et les travaux d'intervention, résonnent avec les idées et contributions avancées dans la thèse à travers le processus de bricolage collectif.

Par exemple, le 17 août 2015, l'État Français a approuvé l'installation d'un hôtel de luxe au sein d'une des ailes du Château de Versailles, abandonnée depuis 2008, sous les raisons qu'une solution doit être trouvée pour rendre le bâtiment économiquement viable et que sans un tel programme, ce patrimoine se scléroserait (Rédaction de France Info, 2015). En 2025, le Château subira donc des travaux d'intervention similaires à ceux

de Nyboder – en terme de prestige national – et à ceux de Molitor – dans le sens où un programme d'hôtellerie y sera intégré. Dès le lancement du projet, les polémiques ont débuté au regard de la controverse de privatiser le patrimoine national.

La présente thèse pourrait donc être utile pour faciliter la compréhension générale – et l'acceptation potentielle – de telles initiatives et la mise en place de compromis qui devront être effectués entre toutes les parties prenantes autour du débat de la préservation du patrimoine face au respect du programme validé : e.g. les partisans du projet pourraient énoncer, utilisant les résultats de la thèse, que la raison d'être de Versailles était simplement d'accueillir la Royauté, la Cour et les personnes fortunées.

Au delà de la question patrimoniale, la thèse peut aussi éclairer le challenge théologique auquel la société fait face. En effet, les nouveaux débats religieux autour de la transformation de lieux de cultes d'une confession à une autre pourraient être plus facilement appréhendés si l'authenticité du bâtiment, en cas de travaux, était seulement conçue comme lieu spirituel dédié à la prière ... sans faire de différence entre les orientations et dénominations religieuses.

"There is no more moral in that story than there is in bricolage"

Patrick Pelloux,
Charlie Hebdo (n° 1184; 2015: 6)

Instancier grâce au bricolage collectif: le cas de l'Institution des Bâtiments Protégés

RÉSUMÉ : Autour de la question de la modernisation des bâtiments protégés, la thèse analyse comment les acteurs implémentent de tels ajustements contemporains sans pour autant dénaturer le Patrimoine véhiculé et personnifié par le bâtiment. Considéré comme la représentation matérielle de l'institution des Bâtiments Protégés – *i.e.* son instanciation – le bâtiment protégé trouve sa légitimité dans son authenticité dont le respect par les acteurs est primordial pour maintenir la protection institutionnelle. Cependant, parce que la majorité des bâtiments protégés actuels n'ont pas été pensés originellement pour perdurer, *i.e.* être transmis aux futures générations, les travaux d'intervention pour modifier cet artefact bâtiment mènent à de nombreux débats entre les acteurs qui participent à ces projets de construction au regard de ce qui doit être ou non patrimoniallement considéré. Selon l'approche constructiviste de la méthodologie dite de théorie ancrée, et dans l'optique de comprendre comment ces acteurs parviennent à produire un seul et unique artefact, la thèse met en avant le processus de construction de l'instanciation au sein duquel les constructions matérielle et symbolique sont considérées. Pour se faire, l'étude propose de coupler l'Institutionnalisme Scandinave et le Bricolage Collectif. En effet, pour sélectionner les matériaux de construction pertinents pour modifier un bâtiment protégé existant, les acteurs doivent dans un premier temps concevoir un cadre interprétatif, commun et partagé, basé sur l'authenticité du bâtiment qu'ils pensent être nécessaire de respecter selon les trois piliers institutionnels en présence. Un tel cadre est en fait une étape préliminaire servant à implémenter un dialogue double-niveau permettant la matérialisation de l'ensemble des idées immatérielles: 1) entre les acteurs et le cadre interprétatif pour tester les solutions matérielles suggérées et 2) entre chaque répertoire de chaque acteur, comprenant leur ressources à disposition, grâce à six critères de sélection qui aident les acteurs à décider quel matériau il est utile ou non d'utiliser.

Mots clefs : bricolage collectif – instanciation – cadre interprétatif – dialogue double-niveau – critères de sélection – bâtiments protégés

Instantiating through collective bricolage: the case of the Listed-Buildings Institution

ABSTRACT : The dissertation studies how actors implement contemporary adjustments in listed buildings without disrupting their embodied Heritage. The listed building's legitimacy relies on its authenticity whose respect by actors is essential to maintain the institutional protection, as it is the material representation, or instantiation, of the Listed-Buildings Institution. However, intervention works to change such an artifact lead to various debates among actors, as the majority of current listed buildings were not originally constructed to last, *i.e.* to be transmitted to future generations. One debate during intervention works tackles the issue of what needs to be or not to be considered in terms of Heritage. Through a constructivist grounded-theory methodology, the dissertation allows the understanding of how actors succeed in producing one unique outcome. I propose the instantiation construction process in which both symbolic but also material constructions are emphasised. And to do so, I intertwine Scandinavian Institutionalism and Collective Bricolage. Indeed, actors need first to design, with the help of the three institutional pillars, a shared interpretative frame to select relevant building materials. They could thus modify an existing building in regards to what building's authenticity deserves to be respected. This frame acts in fact as a preliminary step to implement a simultaneous two-level dialogue enabling the materialisation of the intangible ideas: 1) between actors and the frame to test the material solutions actors suggest and 2) between each actors' "resources at hand" repertoires by means of six selection criteria that help them to make decision on which material is relevant to use or not.

Keywords : collective bricolage – instantiation – interpretative frame – two-level dialogue – selection criteria – listed buildings